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### **OBSERVATIONS**

ON

# THE CULTIVATION OF ROSES IN POTS

INCLUDING

The Autobiography of a Pot-Kose,

ВY

### WILLIAM PAUL, F.L.S.,

AUTHOR OF "THE ROSE GARDEN," ETC.

AND FOUNDER OF THE ROYAL NURSERIES, WALTHAM CROSS

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### PREFACE TO THE FIRST EDITION.

THE Rose has long been a favourite flower, not only in England, but throughout Europe generally; and there is, perhaps, none other that has ever received such unlimited attention. The ardour manifested of late years in the cultivation of this flower has produced rapid improvements. Many varieties which for some years past have been held in high estimation are now falling aside before the constant introduction of new varieties, which have materially widened the range of this beautiful genus, as well as improved the individual varieties of which it is composed. It is not, however, the design here to treat of Roses generally,\* but of their cultivation in Pots, and this in as brief a manner as the explication of the subject will allow.

This system of cultivation has created some stir among lovers of Roses, and from the decided superiority of the specimens exhibited at the various Horticultural Exhibitions during the present year over those of the preceding, it would appear that Roses are well adapted for Pot plants, and are likely to engage the attention of numerous plant cultivators.

The author would remark that the following observations have been noted down at different times as they have occurred to him, and often somewhat hastily; and in sending forth this pamphlet he does not pretend to instruct his professional brethren, but merely to furnish what he considers a desideratum to those private amateurs who may wish for more particular information.

<sup>\* &</sup>quot;THE ROSE-GARDEN" embraces the whole routine of culture.

### PREFACE TO THE SEVENTH EDITION.

The First Edition of this little book was compiled from a diary of the author's observations and experience while practically engaged in the cultivation of Roses in Pots, and was merely intended to meet the wants of a new phase of Rose-culture. As successive editions have been called for, he has endeavoured to convert the original brief notes into more solid matter, and to convey such additional information as he may have gathered over a more lengthened period of practice. Roses in pots, few or many, are now seldom absent from any good garden, and while their culture is considered by some to be critical and difficult, the Author believes that no plants are more easy to deal with, if their nature and requirements are studied, mastered, and reasonably attended to.

These "Observations" have been translated into the French language on two separate occasions, also into Spanish, and not long since an edition in German reached the Author from Stutgard.

Pauls' Nurseries, Waltham Cross, Herts.

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### **OBSERVATIONS**

ON THE

## Cultivation of Roses in Pots.

### PRELIMINARY REMARKS.

HEN the first edition of this little book was published, Roses were grown almost exclusively to flower in the open ground.

The idea of cultivating Roses in Pots as exhibition plants emanated from the Horticultural Society of London, which first offered

prizes for the best specimens that should be produced. The offer did not meet with so ready a response as might have been expected. The exhibitor of flowers merely was not prepared all at once to incur the additional labour of producing the plants in pots. Besides, was it certain that they would succeed under this mode of culture? It was at best but an experiment; and hence, probably, the tardiness of some, and the total rejection of the scheme by others. But it is no longer necessary to speculate on the aptitude of Roses for Potculture—their suitableness is now fully proved; and it rather appears remarkable that their capabilities should not have been earlier tested. While our floral exhibitions had their Heaths, Pelargoniums, and Fuchsias in pots, the blossoms only of the Rose were shown; and these, jolted by travelling from a distance, or languishing from the heat of the exhibition tents, conveyed a very inadequate idea of the characters of a flower whose chief beauty consists in its freshness. That the Rose, while easy of culture in a pot, requires

great care and judgment to bring it to perfection by a given day, cannot be denied; but this fact should have been no drawback to its general cultivation. This affects the exhibitor only, and affects every exhibitor alike.

Then, in regard to the value of the Rose as a pot-plant, it may be said that for beauty, variety, and sweetness it yields to no other flower. The lengthened period for which it blooms, and the accommodating character of the plant—the various forms it is capable of taking—the different soils in which it may be grown—are also points which lend to it an additional interest.

# ADVANTAGES OF GROWING ROSES IN POTS.

One great advantage of growing Roses in pots is that they may be removed from place to place at pleasure when in bloom. Another advantage is that by this system plants may be had in flower throughout the year. Three sets of plants are requisite to accomplish this. The first, which are grown out-of-doors, or in a cold pit, will flower from May till November; the second, which are retarded, will flower from November till February; and the third set, which are forced, from February till June. To this point we shall shortly recur.

But there are other advantages, when plants are grown in pots, of which we are not able to avail ourselves when they are growing in the open ground. With regard to the tender varieties of Roses, the advantages are very great, if we only take into consideration the facilities afforded of protecting them from frost and heavy rains by means of pits or a house, and it is not surprising to find they thrive so much better under glass than when exposed to all the changes and severities of the weather. The hardy kinds, however (except a few be introduced by way of varying the

colours to a greater degree), certainly need not be grown under glass; the pots should be plunged in the ground, and an airy, yet sheltered, situation in the garden should be chosen.

### CHOICE OF PLANTS.

It is pretty generally known that some varieties of Roses thrive best on their own roots, and some as worked plants. Any experienced Rose-grower will be able to furnish the purchaser with information on this point should he need it. The ordinary sized plants priced in the Rose catalogues are not always the most desirable. Rose-growers have usually on hand what are termed "extra-sized" plants, and these, though somewhat more costly per plant, are really the cheapest in the end, especially for the inexperienced grower, or for those who wish to realise a good display at once. Supposing a given sum to be fixed on, it would likely prove more satisfactory to purchase a small number of the larger plants than a greater number of the small ones.

# SUGGESTION FOR GROWING TEA ROSES NEAR LONDON.

Hitherto the Chinese and Tea-Scented Roses have not been grown with much success in the immediate neighbourhood of London, nor in the north of England, when planted in the open ground. It is notorious that no collection, however small, can be complete without some portion of these Roses; and it is the vexatious disappointment attendant upon their constant failure, and nothing else, that could have caused their growth in certain localities to have been given up. Doubtless, in some instances, an impure atmosphere may have caused their failing; but it is my conviction that, if carefully examined, the soil and situation would more often explain the difficulty.

The ease, then, with which we can remedy these disadvantages, when the plants are grown in pots, leads me to propose their cultivation in this way to those with whom they have not hitherto succeeded; and there is good ground to believe they will succeed well in this manner, and especially if grown under glass. Except for forcing, cold pits are perhaps as good as a house, but wherever they may be placed, they should be kept close to the glass, and exposed to a free circulation of air. They should have the advantage of dews and soft showers; the lights in summer being merely used to protect them from cold nights or rough weather, and, by help of mats or canvas, from a hot sun.

### METHODS OF GROWTH.

Among Roses there are two distinct kinds of plants—Worked Plants, comprising the budded and grafted ones; and such as are grown on their own roots. Both succeed well in pots, but individual kinds often thrive better in the one way than in the other; and in making a selection it will be well to ascertain the mode in which each sort flourishes best. It has been said that a part of the plants should be grown to bloom in the natural season—from May till November; another part, as forced Roses, blooming from February till June; and the remainder, as retarded Roses, to enliven us with their brilliant tints and fragrance throughout the dreary months of winter. To secure flowers in their natural season will first engage our attention; forcing and retarding will be a matter for after consideration.

### TRANSPLANTING AND POTTING.

Autumn (October), immediately after rain, is the most favourable time to remove both worked plants and others from the ground; and such as have grown

moderately, with well-ripened wood, should be chosen. The sized pots best suited are 6-inch, 8-inch, 9-inch, and 11-inch, according to the size of the plants, and the pots should be well-drained. In potting, the soil should be pressed firmly in the pots, watering freely afterwards, through a fine rose, to settle the soil about their roots. So far of worked plants. The cultivation of the Autumnals on their own roots may be commenced at any season, as they are usually kept growing in pots. purchased in spring, in 5-inch pots, they may be immediately shifted into 6-inch pots, then plunged and watered continually, as required. Our aim being to get the plants strong, they should not be suffered to flower the first year. We should also endeavour, through the growing season, to bring them to form a few vigorous shoots, in preference to a greater number of weak ones. To accomplish this it is advisable to rub out some of the buds when pushing, keeping in view the handsome formation of the plant. The plants may be shifted once or twice during the growing season, as required; and in the following spring we shall probably find them in 8-inch pots preparing for a vigorous growth and bloom.

### THINNING OUT.

When potting in autumn all suckers and soft wood should be cut out from the worked plants, and straggling shoots shortened back to within a few eyes. Where too thick, some of the shoots may be cut out entirely; from three to seven, in a young plant, according to the habit of growth, being in most cases sufficient. Thinning in summer, immediately after flowering, is very beneficial. The best ripened shoots should be left, and such as stand in the best position for the well-forming of the plant. The permanent shoots may be shortened in November and March; some at both periods, the former to obtain an early, and the latter a later bloom.

### SOIL.

The soil in which Roses succeed well, and that generally used here, is,—two parts of stiff turfy loam, broken up, but not sifted; two parts manure (road-gatherings laid by for a season, or the remains of a hot-bed, not too far decomposed); and one part charred earth or sand. This compost should be thrown up in a heap in autumn, and turned two or three times during winter, and a little newly-slaked lime scattered throughout to destroy worms and grubs. This is the soil used for the mass; but for the delicate rooting and tea-scented varieties, Chinese, &c., it may be improved by the addition of one part leaf-mould or fibrous peat.

### PROTECTION.

After potting, the plants taken from the ground should be removed to a cold pit, syringing and shading, if sunny weather, for a week or ten days. Here they will soon form fresh fibrous roots, and scarcely suffer from their It will be well if all the tender varieties can be removal. allowed to remain in a pit during winter: otherwise they should be removed to the north side of a wall or fence, and a thatch of fern, or beech boughs, with the leaves on, formed; or any other mode of protection that can be more readily devised, to secure them from rain and frost. Indeed, it is clearly evident that the rains of autumn as seriously injure the delicate-rooted Roses, as the frost in winter; for during the mild winter of 1842-43 many of these died, which was doubtless owing to their receiving too much moisture in autumn, whereby the roots perished. No plants require much water when in a comparatively dormant state.

Thus, then, the tender varieties may be protected from injury during winter, and the hardy ones may be removed from the pits about a month after being potted, and plunged at once in the open ground where intended to be grown and flowered.

#### PRUNING.

About the middle of November pruning may be performed in order to effect an early bloom. The plants having been thinned out previously, all that is now required is the shortening-in of the remaining shoots, It is a difficult matter to lay down any precise rules with regard to pruning, upon the judicious adaptation of which depends not only the well-forming of the plant, but in a great measure the perfection of flowers also. In order to prune Roses with certainty of success, we ought to know the character of each plant we are about to operate on; for roses of the same group ofttimes require very different pruning. The best criterion we can offer is, perhaps, the habit of growth. Among the Hybrid Chinese, the two favourite old Roses Charles Lawson and Chénedolé, both vigorous growers, frequently occasion great disappointment by not blooming. The failure will probably be found to arise in most cases from the method of pruning. These Roses, and others of like habit, should be well thinned out, and the shoots that are left for flowering shortened but little. Others of the same group (Hybrid Chinese), that are weak or moderate growers, may be shortened-in close, such as Comtesse Lacenède, a beautiful and well-known Rose, Then there are varieties of intermediate growth, which may be pruned in proportion. The groups Provence and Moss may be pruned closer than the Hybrid Chinese, The Autumnal Roses there is little fear of pruning out of bloom; early or late, they are sure to flower. The Chinese and Tea-scented, when grown on their own roots, should be cut close to induce them to throw up shoots from beneath the ground, as these will grow much stronger than shoots formed above ground, and flower

beautifully through the summer and autumn. point, too, should be borne in mind, that Roses when grown in pots may be pruned closer than when grown in the open garden, One season I shortened back the shoots of the newly-potted Antumnals, Moss and Provence, from two to four eyes; and what with thinning and shortening the plants looked very naked, and at first sight appeared to many to have been cut too much. But when considering that each of the remaining shoots would produce two, three, or four new shoots, and that the plants were not in the open ground, but in pots, it was evident such was not the case; and this their aftergrowth and flowering fully confirmed. When dealing with the most vigorous kinds of Hybrid Chinese and Hybrid Perpetual. I left no more than six eyes on a shoot; and though the plants were young, and consequently small, their blooming, both as regards the size and the abundance of flowers, was all that could be wished for.

### REMOVAL OF TENDER VARIETIES.

By the end of March, if room cannot be granted them in pits or a greenhouse, the tender varieties may be brought from their winter quarters and plunged in a sheltered situation ont-of-doors. Such as were left unpruned for late flowering should now be pruned. It should, however, be borne in mind that if the plants can be allowed to remain in the pits through the spring they will bloom much earlier, in greater perfection, and the foliage will be of increased beauty.

### PLUNGING.

It is an excellent plan, in plunging, to place the pots so that the bottoms rest on inverted seed-pans or flowerpots. This secures a free drainage, prevents the roots growing through the bottom of the pots into the soil, and is an effectual barrier to the ingress of worms. The pots may be plunged level with the ground, and so far apart that the plants may not touch each other when full grown. After plunging it is beneficial to cover the surface lightly with decomposed hot-bed manure. It is the practice with some to set the pots on the level ground, filling up the interstices nearly to the rim with saw-dust or cinder-ashes; this in wet situations is the preferable practice. We do not approve of leaving the sides of the pots exposed fully to the air.

#### WATERING.

Water should be given abundantly through the growing and blooming season. Guano-water is an excellent manure for Roses in pots; it should, however, be used cautiously—one ounce to a gallon of water is sufficient—and it should not be applied until the small flower buds are visible, and must be withheld when the colour is seen in the buds. If, from the nature of the soil, or the state of the weather, the plants require watering oftener than once a week, pure water should be given at the intervening periods. It is important that the chill should be taken off water before applying it to the plants. Where possible, a small tank should be placed in the house to take the soft water from the roof, which is much superior to that obtained from a spring or well.

# DESTRUCTION OF CATERPILLARS, GREEN-FLY, &c.

When the buds first break, and continually afterwards, the plants should be keenly sought over, to destroy the grub and caterpillar, which travel from shoot to shoot, eating out the growing points, and thereby destroying the bloom. Some of these are mere threads in appearance, and can scarcely be detected till some mischief is done. A finely pointed knife or a large

needle is the best instrument with which to compass their destruction. The green-fly is often very annoying. The most effectual way of ridding ourselves of these pests appears to be by removing the plants to a green-house for the time, or enclosing them, as they stand in the beds, with a covering of wet garden mats placed double, or oiled canvas, and then fumigating with tobacco. Perhaps the simplest method of destroying green-fly is by the aid of M'Dougall's Tobacco Sheets. One sheet is sufficient for 1000 cubic feet of space. They are also most economical and effectual for fumigating pits and small greenhouses.

### DISBUDDING, &c.

When the buds first push, if two or three break close together, the weakest, or those taking the least favourable direction, should be rubbed out. Such shoots as are inclined to grow rank, without blooming, should be stopped, or taken out if not wanted to form the head, for they appropriate to themselves the sap which should be directed into the flower-branches; and, further, render the plants of uneven growth. Any flower-buds which are forming imperfectly should be nipped out; and the size of the central flowers may be increased by removing, at an early stage, the small surrounding flower-buds.

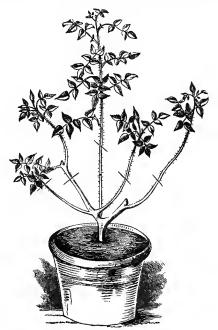
### SUCKERS.

In dealing with worked plants, suckers from the stock should be looked after; and whether from above or under ground, be invariably destroyed. It will also be found beneficial to keep the surface of the soil constantly in a loose state.

### TYING UP AND TRAINING.

As the plants advance in growth, some will require sticks to keep the shoots apart and support the flowers.

The few which hold their flowers gracefully, and show themselves well, are not perhaps improved by being drawn from their natural position of growth; but where the flowers do not show themselves to advantage, or the shoots become much crowded, the plants may be im-



No. 1.—Pyramid of Two Years' Growth.

proved in appearance, and really benefited, by drawing the lower shoots downwards towards the edge of the pot, where they may be fastened to a piece of bast or wire made to pass beneath the rim; the upper shoots may then be drawn out to sticks. A neat hoop, fixed

horizontally about the centre of the head of the plant, admits of a very pretty method of arrangement. If the plant be large, two, or even three, hoops may be requisite, to which the shoots should be drawn, inclined downwards, as they are when growing sure to rise sufficiently. This—the circular method of training —is the most natural one; but for the sake of effect, when intended for exhibition, the plants are sometimes trained to a face, so that all the flowers may be seen from one point at the same time. This is, to use a familiar expression, placing the best side towards London, and would undoubtedly be an excellent method if we could always hide the back of the plant, and feel satisfied with growing half plants instead of whole ones. Our favourite form for most varieties is a pyramid; and as the fashioning of the plant is partly accomplished by pruning, we revert for a moment to that operation.

The accompanying illustration (No. 1) is intended to show a plant two years old that has just completed its growth. The intersecting lines show the manner in which it should be pruned. Thinning has been superseded by disbudding during the season of growth. Immediately after pruning, the shoots should be drawn as near the horizontal position as possible without straining them, and left so until the eyes have pushed to the length of half-an-inch; the plant may then be brought back to its natural form.

The next cut (No. 2) shows the state of this plant in the season of bloom. But it is not yet perfect. It requires another year's growth.

In the next cut (No.  $\frac{3}{3}$ ) we see it pruned, trained, and commencing the third year's growth. The form is easy, graceful, and by it the shoots, leaves, and flowers are shown to advantage, and are open to the beneficial influences of the sun and air.

But there are some kinds of very dwarf growth for

which the pyramidal form of training is not the most advantageous. Such should be trained as round bushes.

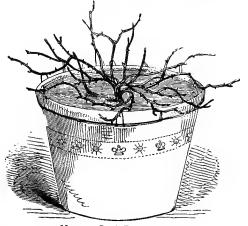


No. 2. - Pyramid of Two Years' Growth in Bloom,

The accompanying illustrations (Nos. 4 and 5) will convey our idea of the form they should assume better than a detailed account of treatment. This would indeed be nearly a repetition of the last mode; the difference is, they require shortening to two, three, or four eyes in order to preserve the plant handsome and develop the eyes capable of producing the finest flowers. As the shoots rarely exceed a few inches in growth, and

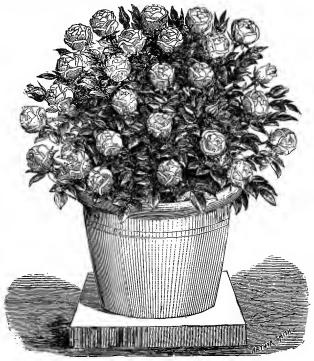


No. 3 .- Pyramid of Three Years' Growth, Pruned.



No. 4.—Bush Rose, Pruned.

the eyes are remarkably close together, the plant must, if treated thus, always remain of lowly growth. Our last sketch (No. 4) represented a full-grown Bush-rose newly pruned. The present sketch (No. 5) represents the same in flower.



No. 5 .- Bush Rose in Bloom.

### SHADING.

When the plants commence flowering it will be necessary to shade them during the middle of the day; or if

a house with a north aspect is vacant, where they can be fully exposed to light yet shaded from the sun, they should be removed thither a few days before coming into flower. By this plan the plant remains longer in bloom, the flowers grow to a larger size, and retain their brilliancy for a longer period.

### REPOTTING.

This operation may be performed at any season of the year. When the pot becomes crowded with roots the plant should be repotted. It is our practice to glance over the stock occasionally in the summer months, and whenever a plant is observed growing vigorously it is at once removed to a larger pot. But it is of the general repotting that we would now more especially speak. Every plant should be repotted at least once a year, and the most advantageous time is perhaps September, but roses for early forcing should be repotted in June or July. A good portion of the old soil should be shaken away in the operation; all wild suckers should be eradicated, worms withdrawn, and such plants as require it placed in larger pots.

### CHOICE OF VARIETIES.

We will now proceed to describe a few kinds which appear best calculated for growing in pots.

To select varieties to meet the concurrence of all cultivators is, I fear, a difficult task, if not impracticable; so much in flowers depending on taste that probably no two persons, though equally well acquainted with Roses, would select the same kinds.

# CHARACTERISTICS OF VARIETIES SUITED FOR POT-CULTURE.

In selecting the following from an immense number of varieties which I have had constant opportunities of looking over while in bloom, I have endeavoured to hold in view the following points:—

- 1. Elegance of habit, regarding both growth and flowering.
  - 2. Contrast of colour.
  - Abundance of bloom.
  - 4. Form or outline of the individual flower.
  - 5. Duration of bloom.
  - 6. Sweetness.

Probably few varieties will have a claim on all these points; some combine them more numerously than others.

The habit of a plant is always deserving of regard, and especially when intended to be grown in a pot. A Rose cannot be good for this purpose, however beautiful the flower, unless the tout ensemble is elegant. As a class of Roses the Bourbon Perpetuals may perhaps be given as a standard of habit, but they cannot vie with the Hybrid Perpetuals in richness and splendour. The latter, the Hybrid Bourbon, and the Tea-scented, stand highest in rank as Pot-Roses.

In a collection *contrast of colour* is of undoubted import; and some will probably be found selected on account of their distinctiveness which otherwise would not have found place here.

With regard to flowering, many of our profuse-blooming Roses are not the most double, nor the finest in form; but the magnificent appearance they present as pot-plants when viewed en masse may perhaps be considered a sufficient plea for their insertion. These, however, which are few in number, may be distinguished through the list by the prefix of an asterisk.

There are various styles of Roses, each good in its way. Whether the *form* be cupped, globular, or compact, the outline should be circular, and the petals smooth and round at their circumference.

By duration of bloom allusion is more particularly made to the length of time the flowers continue in perfection when open than to succession of flowers. Star of Waltham (Hybrid Perpetual), for example, and, in fact, most thick-petalled Roses, hold their flowers in perfection for some days, whereas others fall almost as soon as expanded. Now, to obtain a number of flowers on one plant in all the various stages of bloom at a given time, is one great point the cultivator of Roses in pots for exhibition should never lose sight of. Therefore, both among Summer and Autumn Roses, such as are for some time in perfection as buds, and when expanded remain for some time in perfection as flowers, are considered the most desirable.

Sweetness, which is an inestimable property of a Rose, needs no comment.

### CLASSES PREFERRED.

The classes of Roses that can be practically recommended for growing in Pots are — Moss, Provence, Hybrid Perpetual, Hybrids of the Chinese and Bourbon, Noisette, Bourbon, Chinese, Tea-scented, and Hybrid Tea-scented. The Boursault, Ayrshire, and Sempervirens are pretty grown as climbers, but are not fitted for exhibition. The kinds marked thus \* flower in the greatest profusion.

### MOSS.—Blooming in Summer only.

The Moss Rose, which is supposed to be an accidental variation of the Provence, is a very general favourite; it delights in a rich soil, and thrives best on its own roots or budded on very short stems. There are but

<sup>\*</sup> The prices of the varieties throughout may be obtained by consulting the Rose Catalogue, published annually in September, and transmissible gratis per post, on application to the Nurseries, Waltham Cross, Herts.

few varieties that can be recommended for Pot-culture; still these few, cast among the many, give a great degree of distinctness to a collection, and they certainly cannot be dispensed with anywhere:—

COMMON, pale rose, beautiful, large and full.

CRIMSON GLOBE (Wm. Paul & Son), fine deep crimson, large and perfect.

CRESTED, rose, beautiful, large and full.

\*LITTLE GEM (Wm. Paul & Son), crimson, small and well mossed, the plant is of compact growth, and densely covered with miniature flowers.

#### PERPETUAL MOSS.

Blooming in Summer and Autumn.

BLANCHE MOREAU, pure white, large, full, and beautiful.
MADAME WILLIAM PAUL, very bright rose, large, full, and finely cupped.

SALET, rose, blush edges, large and full.

PROVENCE.—Blooming in Summer only.

The old Cabbage Rose is excellent for growing in pots. The flowers are large, well formed, globular, and very sweet.

CABBAGE or COMMON, rosy-pink, large and full. WHITE PROVENCE, pure white, large and full.

### AUSTRIAN ROSES AND THEIR HYBRIDS.

Soleil D'Or, a very beautiful bybrid between the Persian Yellow Rose and a Hybrid Perpetual. The flowers, which are very large and somewhat irregular in form, are a rich golden yellow colour suffused with orange and crimson.

#### HYBRID PERPETUAL.

Blooming in Summer and Autumn.

These Roses have become universal favourites, and deservedly so. Their foliage is beautiful, and the flowers of some kinds are finely shaped. The rapid

influx of new varieties has increased and improved this class surprisingly within the last few years. They were formerly too much of one colour—crimson-purple; but this is now remedied, and there is as great a variety here as in other classes. Some of these will be given as Pyramid Roses, for which they are well suited, blooming finest and best in summer, but they are also good in autumn. They are excellent Forcing Roses, hardy, and very sweet.

ABEL CARRIERE, velvety maroon, shaded with violet.

ALFRED COLOMB, bright red, large, full, and of beautiful form.

ALFRED K. WILLIAMS, carmine-red, large and full, flowers smooth and of fine form.

AMERICAN BEAUTY (see MADAME FERDINAND JAMIN).

BARON DE BONSTETTEN, red, black, and crimson, distinct.

BEAUTY OF WALTHAM (Wm. Paul), cherry-colour to carmine, large and full, form cupped, very hardy; one of the loveliest and sweetest, blooming abundantly.

BLACK PRINCE (Wm. Paul), scarlet-crimson, shaded black.

CAPTAIN HAYWARD, crimson-carmine, good form, large shell petals.

CHARLES LAMB (Wm. Paul & Son), bright red, colour clear and lovely, beautiful in bud.

\*CLIO (Wm. Paul & Son), flesh pink, globular in form, with high centre; a splendid grower.

COMMANDANT FELIX FAURE, flowers vermilion and lake, shaded black, very showy and good.

Countess of Oxford, bright carmine-red, shaded.

CRIMSON QUEEN (Wm. Paul & Son), a magnificent flower of rich velvety-crimson colour; foliage large and handsome.

\*Crown Prince (Wm. Paul & Son), bright purple, shaded with crimson, large, fine petals.

\*DAVID R. WILLIAMSON (Wm. Paul & Son), soft rich carmine-rose; flowers of finest quality and very sweet.

\*DR ANDRY, dark red, large and full.

DR WILLIAM GORDON (Wm. Paul & Son), brilliant satinpink, extra large, deep petalled high centred flowers of magnificent effect.

DUKE OF ALBANY (Wm. Paul & Son), vivid crimson, changing darker to a shading of velvety-black, large and full.

DUKE OF EDINBURGH (Wm. Paul), brilliant scarletcrimson shaded with maroon, large and full.

DUKE OF TECK, bright crimson - scarlet, clear and distinct.

DUKE OF WELLINGTON, bright velvety-red shaded with blackish maroon.

DUPUY JAMAIN, cerise, of fine form and substance, free.

EARL OF PEMBROKE, velvety-crimson shaded bright red.

ELLA GORDON (Wm. Paul & Son), bright cherry colour, globular, large and full.

ETIENNE LEVET, carmine, large and full.

\*FISHER HOLMES, reddish-scarlet shaded with crimson.

FRANÇOIS MICHELON, deep rose, silvery, large and full.

\*FRAU KARL DRUSCHKI, snowy white, large and full, splendid petals; quite first-rate.

\*GENERAL JACQUEMINOT, brilliant red, large and double. GLOIRE DE MARGOTTIN, dazzling red, large and full.

\*HELEN KELLER, rosy cerise, free and good.

HUGH DICKSON, brilliant crimson shaded with scarlet; very large; a superb rose.

\*JEANNIE DICKSON, rosy-pink, large and handsome.

JOHN HOPPER, rose, crimson centre, reverse of the petals purplish lilac, large and full.

LOUIS VAN HOUTTE, reddish-scarlet shaded with amaranth and blackish-crimson; large, full, and fine.

MADAME FANNY DE FOREST, salmon-white changing to white tinted with rose.

MADAME FERDINAND JAMIN (AMERICAN BEAUTY), deep rosy crimson, with very fine petals, full and cupped, very fragrant.

MADAME GABRIEL LUIZET, pale pink colour, delicately beautiful, large and full.

MADAME LA BARONNE DE ROTHSCHILD, clear pale rose shaded with white, very large and good.

MADAME LACHARME, white faintly flushed with rose, large and full.

MADAME VICTOR VERDIER, rich bright rosy cherry colour, large, full, and of fine form, cupped.

MDLLE. EUGENIE VERDIER, flesh-coloured rose, silvery-looking, very large and full.

MAGNA CHARTA ( $\overline{W}m$ . Paul & Son), bright pink suffused with carmine, very large, full, and of good form.

MARCHIONESS OF LORNE (Wm. Paul & Son), fulgent rose, finely cupped, very sweet.

MARGARET DICKSON, white shaded flesh.

MARIE BAUMANN, carmine, large and full, very fine.

MARQUISE DE CASTELLANE, bright rose, large and full.

MERVEILLE DE LYON, white washed with satin-rose, very large and full, fine form.

\*MRS JOHN LAING, soft pink, large, finely shaped and very sweet.

MRS R. G. SHARMAN CRAWFORD, deep rosy-pink, distinct.

PAUL NEYRON, dark rose, very large and fine.

PRIDE OF WALTHAM (Wm. Paul & Son), flesh colour shaded with rose, clear and distinct, very large and full.

PRINCE CAMILLE DE ROHAN, crimson-maroon shaded with blood-red, very rich and velvety, large and full.

\*QUEEN OF QUEENS (Wm. Paul & Son), pink, blush edges, large, full, and of perfect form.

SENATEUR VAISSE, bright red, large, and very double. SILVER QUEEN (Win. Paul & Son), silvery blush shaded, distinct, and very lovely.

SPENSER (Wm. Paul & Son), satin pink shaded white, large and full; a grand Rose.

STAR OF WALTHAM (Wm. Paul), crimson, of large size and good form; petals large, round, and smooth.

SUZANNE MARIE RODOCANACHI, soft rosy cerise, large and full.

TRIOMPHE DE CAEN, scarlet crimson shaded purple.

ULRICH BRUNNER FILS, bright cherry-red, very large and full.

\*Victor Hugo, brilliant scarlet crimson shaded with purple.

\*Victor Verdier, rosy carmine, purplish edges; a large showy free-growing Rose of good quality.

VIOLETTE BOUYER, white shaded with flesh-colour, large and full.

### BOURBON PERPETUAL.

Blooming in Summer and Autumn.

These Roses, although of smaller size than those of the preceding group, are by no means of less merit, being mostly of fine form and habit, yielding a profusion of distinct and beautiful flowers.

\*BARONNE DE MAYNARD, pure white; one of the best white Roses.

MADAME ISAAC PEREIRE, rosy carmine, very large and full.

MADAME PIERRE OGER, white edged with lilac, distinct and pretty.

#### POLYANTHA.

These we regard as dwarf or miniature varieties of the "Rosa multiflora." They are exceedingly pretty grown as pot plants, and are very free and perpetual flowering.

\*Aennchen Muller, large clusters of brilliant rosecoloured flowers, very free and beautiful.

ANNE MARIE DE MONTRAVEL, pure white, small and full.

\*Aschenbrodel, rosy flesh, centre salmon-orange; very decorative.

CECILE BRUNNER, bright rose, yellowish centres, very free.

\*EUGENIE LAMESCH, buds coppery pink, opening flowers yellow; good.

GLOIRE DES POLYANTHA, rose, with white centres, very free.

\*KATHERINA ZEIMET, large clusters of pure white flowers

\*LEONIE LAMESCH, coppery red shaded with deep red and yellow; a very rich mixture of colours.

\*MADAME N. LEVAVASSEUR, large pyramidal clusters of crimson flowers, resembling *Crimson Rambler* in form.

\*Maman Levavasseur (Baby Dorothy), flowers pink, growth and habit of Madame N. Levavasseur.

\*Perle D'Or, nankeen, orange centre, small and full.
Perle des Rouges, velvety crimson, the deepest colour yet obtained in this class.

## HYBRIDS OF THE CHINESE AND BOURBON. Blooming in Summer only.

Many of this class are profuse bloomers; the flowers are large, and some perfect models of form. The Hybrid Bourbons are remarkable for their robust habit and bold foliage; they are perfectly hardy, and require but little pruning. Many of them form fine Pyramidal Roses in pots, the plants attaining to a very large size.

\*CHARLES LAWSON, vivid rose shaded, large and full; one of the best.

\*COUPE D'HEBE, rich deep pink, large and very double; one of the best.

Juno, pale rose, blush edges, very large and full.

\*PAUL RICAUT, bright rosy-crimson, large and full; one of the best.

### \*(T.) NOISETTE.

### Blooming in Summer and Autumn.

On account of blooming fine so late in the season, the Noisettes form a very valuable class of Roses. The most of them are better trained spirally, in which way their large trusses of bloom produce a very pleasing effect. Under that method of growth, then, we shall class the most of them, but a few may be retained here.

ALISTER STELLA GRAY, pale yellow with orange centre, changing to white; small, and produced in clusters.

<sup>\*</sup> The letter T, preceding any class, indicates that the varieties of which it is composed require protection from frost in winter.

BOUQUET D'OR, pale yellow, centre coppery.

CELINE FORESTIER, pale yellow, free bloomer, large and full.

\*CREPUSCULE, rich coppery yellow, rayed and tinted with Nasturtium red.

\*DESCHAMPS (Longworth Rambler), bright carmine, very free-flowering.

LAMARQUE, sulphur-yellow, beautiful, very large and full. L'IDEAL, coppery rose shaded with copper colour and gold. MADAME CAROLINE KUSTER, pale yellow, large and full. MADAME PIERRE COCHET, intense orange yellow shaded scarlet: handsome buds.

SOLFATERRE, fine sulphur-yellow, large, and very double. WILLIAM ALLEN RICHARDSON, fine orange yellow, distinct.

BOURBON.—Blooming in Summer and Autumn.

This class of Roses is truly elegant. The varieties, originally of one colour only, are now well varied by the introduction of many purple, crimson, and blush Before the appearance of these the Bourbons were nearly all of a rose colour. Probably the dark varieties now obtained have something of the Chinese in them; but this crossing slightly affects their hardiness, while in most points they rival and in one point (profusion in blooming) surpass their Bourbon parent. colours of the Bourbon Roses are very clear; the petals are smooth, thick, large, and generally well formed; the foliage broad and handsome. The small growers require close pruning. They are beautiful Pot Roses, but do not generally attain to sufficient size to be grown as exhibition plants. To this remark, however, "Souvenir de Malmaison" is a splendid exception.

A. MAILLE, carmine-red, large and full.

\*LORNA DOONE (Wm. Paul & Son), carmine shaded scarlet; large, full, and globular; very perpetual, and sweet.

\*MRS BOSANQUET, delicate pale flesh, large and double.

\*Queen, buff rose, free bloomer, large and double.

SOUVENIR DE MALMAISON, clear flesh-colour, edges blush, beautiful, very large and full.

### (T.) CHINESE OR BENGAL.

Blooming in Summer and Autumn.

Although less hardy than the last group, these are very valuable among the Autumnal Roses, being continually in flower. They group well with the Teascented; and their colours being, in part, those which are deficient among the latter, they are the more desirable. They delight in a rich soil, require close pruning, and when grown in pots succeed best on their own roots. They are not exhibition Roses.

- \*ARETHUSA (Wm. Paul & Son), growth and habit of "Queen Mab," flowers yellow tinted with apricot.
- \*Aurore, apricot-yellow tinted with salmon rose and carmine; very lovely.
- \*BARONNE PISTON DE ST CYR, pale flesh, bright and distinct.
- \*CHARLOTTE KLEMM, fiery-red shaded with cinnabar and blood-red, semi-double; very effective.
- \*COMTESSE DE CAYLA, coppery-carmine shaded with orange and yellow; very rich and effective.
- \*CRAMOISIE SUPERIEURE, rich velvety-crimson, beautiful, full.
- DUCHER, white, fine form, full and free.
- \*DUKE OF YORK (Wm. Paul & Son), rosy-red and white, handsome buds.
- \*FABVIER, brilliant scarlet, semi-double.
- \*JEAN BACH SISLEY, delicate silvery-rose; large for its class, and very sweet.
- LITTLE PET, white, small and double; dwarf.
- \*MADAME EUGENE RESAL, China rose shaded copperyred; a most charming Rose.
- \*MADAME LAURETTE MESSIMY, rose shaded yellow; very effective.

\*QUEEN MAB (Wm. Paul & Son), soft rosy-apricot shaded yellow; a most lovely Rose, excellent for decoration.

RED PET, dark crimson, flowers small and abundant.

## (T.) TEA-SCENTED.

Blooming in Summer and Autumn.

These are, in fact, but a selection from the Chinese, on account of their delicious odour and shining foliage. The flowers are mostly large; the tints of some are remarkably rich, of others as peculiarly soft and delicate. Every collection of Pot-Roses should include a quantity of these, as they become of greatly increased beauty under this system of culture; and, moreover, cannot be depended on in all soils and situations when grown in the open ground. They vary much in degree of hardiness and sweetness; but all are tender and all are sweet. Many are excellent for forcing.

ANNA OLLIVIER, flesh-coloured rose, large and full.

\*Boadicea (Wm. Paul & Son), peach colour tinted with pink and violet, large deep flowers. Very fragrant.

\*BRIDESMAID, a clear bright pink sport of "Catherine Mermet."

\*CATHERINE MERMET, flesh-coloured rose, large, finely formed, and very beautiful.

COMTESSE DE NAIDAILLAC, flesh colour shaded with copper, large, full, and fine.

DEVONIENSIS, pale yellow, superb, very large and full. EMPRESS ALEXANDRA OF RUSSIA (Wm. Paul & Son),

bronzy-salmon and lake red; a distinct colour.

\*Enchantress (Wm. Paul & Son), creamy white shaded buff. As free as a monthly Rose. One of the very best for winter blooming.

ETOILE DE LYON, saffron yellow, brighter centre.

FRANCISCA KRUGER, coppery yellow, fine form.

FRANCIS DUBREUIL, velvety-crimson, long buds of exquisite shape.

GOLDEN GATE, creamy white, fine flower, buds handsome.

HON. EDITH GIFFORD, flesh-colour, centre salmon-rose changing to white.

Innocente Pirola, cream-colour, centre shaded with yellow, very large, full, globular, and fine.

\*ISABELLA SPRUNT, sulphur-yellow, flowers abundantly, and beautiful in bnd.

JEAN DUCHER, lemon, salmon and peach, variable, large, full, and globular.

JEAN PERNET, bright yellow, changing to clear yellow, large and full.

KONIGIN WILHELMINA, rosy pink, Dahlia-like flowers, large and full.

\*LADY ROBERTS, reddish apricot, base of petals coppery; very distinct.

\*Lena, apricot, the edges of petals primrose yellow.

\*MADAME ANTOINE MARI, ground colour rose freely washed and shaded with white. Buds very handsome.

MADAME CHARLES, bright apricot, large, full, and globular.

\*MADAME CHEDANE GUINOISSEAU, canary-yellow, pretty and free.

\*MADAME CONSTANT SOUPERT, deep yellow shaded peach. Exceedingly handsome.

MADAME CUSIN, purplish rose tinted with yellowish white.

MADAME DE WATTEVILLE, salmon-white edged with bright rose, large and full.

\*MADAME FALCOT, yellow, in the way of "Safrano," but of a deeper shade, and more double.

MADAME GAMON, apricot shaded with salmon rose, base of petals golden yellow.

MADAME HOSTE, yellow, large, full, and perfect.

MADAME LAMBARD, salmon-pink shaded with rose, large, full, and free.

MAMAN COCHET, flesh-colour shaded salmon, very large; a magnificent Rose.

\*MARIE VAN HOUTTE, white shaded with yellow and rose, large, full, and free,

MEDEA (Wm. Paul & Son), lemon, canary-yellow centre, large, full, and very fine.

MORNING GLOW (Wm. Paul & Son), bright rosy crimson suffused with orange and fawn.

MRS EDWARD MAWLEY, pink shaded salmon. Very large and handsome.

MRS MYLES KENNEDY, silvery white shaded buff. Very large blossoms.

\*NIPHETOS, pale lemon, often snowy white, very large and full.

PAPA GONTIER, rosy crimson, long handsome buds.

PERLE DES JARDINS, yellow, sometimes shaded with apricot, large and full.

PRESIDENT, rose shaded with salmon, very large, and of good form.

RUBENS, white shaded with rose, yellowish centre, large, full, and of fine form.

SAPPHO (Wm. Paul & Son), fawn suffused with rose and yellow; hardy and free.

\*Souvenir de Catherine Guillot, coppery carmine shaded orange.

Souvenir D'Elise Vardon, creamy-white, centre yellowish, very large and full; a splendid Rose.

\*Souvenir de Pierre Norting, apricot yellow washed with golden yellow and shaded with orange.

SOUVENIR DE THERESE LEVET, bright deep red, shaded. SOUVENIR D'UN AMI, salmon and rose shaded, large and

full; fine.

\*SULPHUREA (Wm. Paul & Son), bright sulphur yellow, with fine bronzy foliage that contrasts well with the flower. Buds exquisitely shaped.

SUNSET, deep apricot, very beautiful.

\*SYLPH (Wm. Paul & Son), ivory white tinted peach, fine high centred flowers of great substance.

THE BRIDE, white, shape and style of "Catherine Mermet."

THE QUEEN, white, large, full, and good.

WHITE MAMAN COCHET, a snowy white sport of this fine rose.

# (T.) HYBRID TEA-SCENTED.

In this group are to be found some of the very best roses for pot-culture and for forcing. They come midway between the Hybrid Perpetuals and the Teascented, combining generally the more rigid growth of the former with the charming tints of colouring of the latter. The blossoms in most cases hold themselves erect, which renders them invaluable for cutting purposes. The following is a representative selection:—

ADMIRAL DEWEY, light blush, sport of "Caroline Testout."

Antoine Rivoire, rosy flesh, base of petals yellow; a very fine rose.

- \*Augustine Guinoisseau, flowers rosy white, a nearly white sport of "La France"; very sweet.
- \*Aurora (Wm. Paul & Son), bright salmon-pink, very free and fragrant.
- \*Belle Siebrecht (syn. "Mrs W. J. Grant"), bright rosy pink, very large, and of exquisite form.
- CAPTAIN CHRISTY, delicate flesh-colour, deeper in centre; large.
- \*CAROLINE TESTOUT, clear bright rose, large and double; one of the best.
- CLARA WATSON, salmon and pink, fine deep flowers.
- DORA (Wm. Paul & Son), flowers peach-blossom colour, with deeper centre; a fine bold flower.
- DUCHESS OF ALBANY (Wm. Paul & Son), a fine deep pink, in the way of "La France."
- EARL OF WARWICK (Wm. Paul & Son), rich soft salmonpink, shading in centre to vermilion; very large, full.
- Exquisite (Wm. Paul & Son), bright crimson, shaded with magenta; exquisite form and fragrance.
- FARBENKONIGIN, outside of petals dark red, inside bright red changing to rose as the flowers expand.
- FLORENCE PEMBERTON, creamy white tinted pink very handsome flower.
- GLOIRE LYONNAISE, white tinted with lemon; large, full, and of good shape.

GRACE DARLING, creamy white, tinted heavily with peach colour; very large and full.

GRAND DUC DE LUXEMBOURG, rosy red, reverse of petals brilliant lake; a beautiful combination of colours.

GUSTAV GRUNERWALD, rosy carmine with yellowish centre.

IRENE (Wm. Paul & Son), silvery white, faintly touched with pink; a grand variety with large flowers.

\*KILLARNEY, rose shaded with white; handsome buds.

\*Konigin Carola, very large, colour satiny-rose; a very beautiful sort.

\*LA FRANCE, indispensable as a pot rose, colour pale peach, very large, and free bloomer.

\*LADY BATTERSEA, rosy crimson tiuted with orange; beautiful long buds.

LADY MARY FITZWILLIAM, delicate flesh colour; very large and of beautiful form.

\*Liberty, brilliant crimson, beautiful shape.

\*MADAME ABEL CHATENAY, rosy - salmon carmine shaded pale vermilion rose; one of the best.

MADAME CHARLES DE LUZE, flesh colour, with buffyellow centre; large and full.

\*Madame Edmee Metz, bright rosy pink shaded with salmon; very free.

\*Madame Jules Grolez, fine satin China rose colour; very bright and distinct.

MADAME LEON PAIN, silvery flesh tinted vermilion, base of petals buttercup-yellow.

MADAME RAVARY, buds golden-yellow, open flowers orange-yellow.

MARQUISE LITTA, carmine-rose, vermilion centre; large and full.

MELANIE SOUPERT, salmon-yellow suffused carminepink; extra large.

MRS W. J. GRANT (see "Belle Siebrecht").

PAUL LEDE, rich deep rose shaded with yellow.

PHARISAER, rosy-white centre, deep salmon-rose; fine long buds.

PRINCE DE BULGARIE, silvery flesh shaded with orange and salmon.

SOUVENIR DE MADAME EUGENE VERDIER, white shaded with salmon and deeper yellow; large and full.

Souvenir Du President Carnot, rosy flesh, shaded white; fine long huds.

\*Viscountess Folkestone, creamy-pink, centre salmon; large and sweet.

WHITE LADY (Wm. Paul & Son), magnificent creamywhite flowers with large petals.

## YELLOW ROSES.

Since the first edition of this little work was penned, Yellow Roses have become a special branch of culture. Separate prizes have been offered for them by the Royal Horticultural and Royal Botanic Societies. But what are Yellow Roses? This question provoked some discussion in the pages of the Gardeners' Journal in 1849, through the withholding of a prize by the Royal Botanic Society. To prevent any misconceptions at future exhibitions that Society named the varieties considered eligible for competition. Some of these have since become obsolete, but we reproduce here varieties within the same range of colour.

YELLOW BANKSLÆ.
\*HARRISONII (Austrian).
PERSIAN YELLOW (ditto).
BOUQUET D'OR (Noisette).
CELINE FORESTIER (ditto).
CLOTH OF GOLD (ditto).
CREPUSCULE (ditto).
JOSEPH BERNACCHI (ditto).
MADAME BOURSIN (ditto).
MADAME CAROLINE KUSTER (ditto).
MADAME PIERRE COCHET (ditto).
REVE D'OR (ditto).
SOLFATERRE (ditto).
WILLIAM ALLEN RICHARDSON (ditto).

# TEA-SCENTED and HYBRID TEA-SCENTED:

AMAZONE. BELLE LYONNAISE. BILLIARD ET BARRE. DUCHESSE D'AUERSTAEDT. ETOILE DE LYON. Georges Schwartz. \*GLOIRE DE DIJON. \*Gustave Regis. HARRY KIRK. HENRIETTE DE BEAUVEAU. \*ISABELLA SPRUNT. JEAN PERNET. LENA. LE PROGRES. MADAME CHAUVRY. MADAME CHEDANE GUINOISSEAU. MADAME EUGENE VERDIER. \*MADAME FALCOT. MADAME HECTOR LEUILLOT. \*MADAME HOSTE. MADAME MARGOTTIN. MADAME MOREAU. MADAME RAVARY. MARECHAL NIEL. \*Marie Van Houtte. MEDEA (Wm. Paul & Son). Perle des Jardins. Perle des Jaunes. SULPHUREA (Wm. Paul & Son).

We now proceed to analyse this group. The first on the list—the Yellow Banksiæ—is a pretty enough Rose, with small flowers produced in clusters. It may be grown well in a soil composed of equal parts of loam, peat, and leaf mould. It requires but little pruning; the mere tips of the shoots should be taken off. Spiral training is recommended as the most suitable. The succeeding two varieties are nearly allied in nature and may be grown in a soil similar to the last, but the

SUNSET.

addition of sand, unless the peat or loam be sandy, will prove advantageous. Very little pruning is necessary; some of the shoots may be cut out entirely; the others have their mere ends taken off. If grown on their own roots, they may be trained as globular or columnar bushes; if grown on stems, the branches may be drawn downwards in the form of a Weeping Rose. Cloth of Gold and Solfaterre are of vigorous growth, producing large flowers of great beauty. Both are shy bloomers, especially the former. The same soil as recommended in the early part of this treatise for Pot-Roses in general may be used for these and the other varieties of "Noisette." Little pruning is necessary, and spiral training is recommended. The varieties belonging to the Tea-scented require a rich soil and close pruning. The most advantageous systems of training these are the round bush or the pyramid. Were this group to be viewed critically. it might be said they are not all "purely vellow." It might also be said there are kinds excluded which have as just a right to the appellation of "yellow" as they. But when it is considered that the declension from vellow to white and buff is so gradual that it is scarcely possible to fix the line of demarcation, and that a list of varieties is given from which to select, such criticism has no value. If none others are allowed to be exhibited, or none whose flowers are less yellow when brought to the exhibition tables than those above enumerated, the practical utility of such an arrangement will soon become apparent.\*

# CLIMBERS.

What we have hitherto been accustomed to regard as Climbers are from the classes Boursault, Sempervirens,

<sup>\*</sup> We retain these remarks on "Yellow Roses," although they are now seldom made the subject of special prizes at miscellaneous Flower Shows.—W. P.

Ayrshire, &c. Magnificent as such must be regarded when growing in the open ground, often to the height of twenty feet, and covered with immense trusses of bloom, their semi-double and transient flowers render the greater part not altogether suitable for growing in pots. A growth not too vigorous, and finely-shaped flowers, should be the criteria with regard to Roses grown in pots as climbers, As a great height is not in this instance desirable, the various Hybrids, the Noisettes, and Bourbons, may be chosen, and trained upwards to about five feet, which will probably be found as high as convenient or manageable; not that we would, however, altogether exclude the Ayrshire and Sempervirens, for among them a few admirable Roses are to be found.

Now one great point to be held in view in regard to this system of culture is, to induce the plants to flower from the summit to the ground; for if a few flowers only are to be produced at the top of the plant, then the dwarfer it can be grown the better. This complete flowering, judicious pruning and training will accomplish.

# TRAINING AND PRUNING CLIMBERS OR TWINERS.

In training they may be formed into any shape. Such varieties as have long twining or flexible shoots may be trained spirally, with which view, in pruning, in the first instance, they should be cut-in close, to induce them to form lengthened shoots, which should be trained in their proper course during the season of growth.

The engraving (No. 6) represents a plant two years old. It is autumn, and it has completed the second year's growth. But we look back to the end of the first year's growth in order to speak of the manner in which it was treated in pruning. It had then several weak shoots. These were all cut away but two, one of

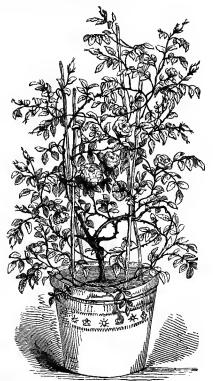
which was cut back to a single eye, which produced the lower shoot of the engraving (No. 6); the other being a short shoot, with a terminal bud, was not shortened at all, and this, as may be observed, produced two shoots. By this treatment no flowers were pro-



No. 6-Twiner, Pruned.

duced, but a strong well-ordered plant was obtained in a short space of time. Now let us look to the future. The main object in pruning now is to obtain flowers. To secure this end the three leading shoots may be shortened level with the tops of the sticks, the lateral shoot (there is but one in this instance) cut back to four

or five eyes, and the probable result will be a tree covered with bloom, resembling in some measure the accompanying engraving (No. 7).



No. 7 .- Twiner in Bloom.

Under this mode of growth a small amount of pruning only is necessary; any superfluous or crowded shoots may of course be removed, and however many laterals there may be, the whole should be cut back to three, four, or five eyes, according to their strength of growth, leaving the fewest eyes on the weakest shoots.

The stiff erect-growing kinds may be formed into short pillars, or trained to flat wires. The former present the most natural appearance, and to effect this from three to five shoots may be allowed in the first instance, and pruned of different lengths; these will throw out laterals, and if tied round a single stick placed in the centre of the pot a column or pillar of roses is formed. In after seasons they may be pruned as proposed for other Roses.

Since the introduction of the Rambler Roses of the Multiflora and Wichuraiana classes, the columnar or pillar form of training Climbing Roses has become very popular. This style was first introduced into the large groups of pot-roses which the Waltham Cross Nurseries have made such a leading feature at the great annual shows of the Royal Horticultural Society held in the Temple Gardens, London, and also at other exhibitions.

These Rambling Roses lend themselves admirably to this mode of training, and when they are clothed from base to summit with their charming clusters and trails of blossom they make splendid specimens for conservatory, dinner-table, and all purposes of decoration.

To obtain such plants they may either be purchased in pots prepared for growing under glass, or potted up from the open ground and grown outdoors for twelve months in advance.

Many of the varieties, such as Dorothy Perkins, Lady Gay, and Hiawatha, have such slender growth that they can be trained into any desired shape.

# CLIMBING VARIETIES.

Here, then, is a list of such varieties as appear best adapted for this purpose:—

## HYBRIDS OF THE CHINESE AND BOURBON.

BLAIRII No. 2, blush-pink, fine, very large and double. CHARLES LAWSON, vivid rose, shaded, large and full.

CHENEDOLE, light vivid crimson, colour exquisite, very

large and double, a fine pillar Rose.

COUPE D'HEBE, rich deep pink, large and very double, one of the best.

MADAME PLANTIER, pure white, free bloomer,

VIVID (Paul), rich vivid crimson, very showy, a good pillar or climbing Rose,

#### BANKSIÆ.

WHITE, flowers white, small, and very double. YELLOW, flowers yellow, small, and very double.

#### MULTIFLORA.

Blush Rambler, a delicate blush variety with fine large clusters of almost single flowers; one of the best.

CLAIRE JACQUIER, nankeen yellow, small; but produced in very large clusters.

CRIMSON RAMBLER, a gorgeous climber, producing large pyramidal clusters of small but brilliant crimson flowers.

GRUSS AN ZABERN, extra large corymbs of snow-white flowers.

HIAWATHA, large clusters of single rich crimson flowers with white eye; very effective.

KATHLEEN (Wm. Paul & Son), large pyramidal clusters of single blossoms, the colour being rich carmine rose with well defined white eye.

LEUCHTSTERN, flowers bright rose with distinct white eye, produced in large clusters.

MRS F. W. FLIGHT, extra large corymbs of brilliant pink flowers, very effective.

PHILADELPHIA RAMBLER, in the way of "Crimson Rambler," but not so free in flowering. The blossoms are richer in colour, of a beautiful shape, and very double.

RUBIN, large clusters of bright ruby red flowers. The wood and foliage also tinged with red.

TAUNUSBLUEMCHEN, purplish crimson flowers, growth and habit of "Crimson Rambler."

TAUSENDSCHOEN, a most charming variety of German origin. The flowers are soft pink in opening, petals reflexed with carmine rose as the flowers expand; produced in large clusters. Quite a distinct novelty, eminently adapted for pot culture.

TEA RAMBLER, coppery pink, changing to salmon pink, tea-scented, good.

WALTHAM BRIDE (Wm. Paul & Son), one of the few fragrant Ramblers. Flowers snow white, produced in large sprays; growth very free.

Waltham Rambler (Wm. Paul & Son), large panicles of single flowers, delicate hydrangea pink under glass, with rich array of yellow stamens; extremely beautiful. Wedding Bells, rosy pink flowers, with paler centre.

## WICHURAIANA.

Alberic Barbier, yellow buds opening creamy white, double, one of the best.

DEBUTANTE, large clusters of soft double pink flowers, very lovely.

DOROTHY PERKINS, an invaluable variety for any purpose, producing graceful clusters of soft rose coloured flowers, rather paler when grown under glass.

EDMOND PROUST, pink, centre shaded with carmine, good. ELISA ROBICHON, salmon buff, base of petals pale yellow. ERNST GRANDPIERRE, yellow buds changing to white.

Francois Foucard, yellow changing to creamy white, semi-double.

GARDENIA, bright yellow in bud, double; one of the best. JERSEY BEAUTY, single pale yellow flowers with bright yellow stamens; a very elegant single rose, with beautiful glossy foliage.

JOSEPH BILLIARD, flowers single, bright carmine, base of petals yellow.

LADY GAY, in the way of "Dorothy Perkins," but the colour is richer and the blossoms larger; a truly splendid variety.

Paradise, single pink and white flowers, quaintly twisted petals.

PAUL TRANSON, large panicles of rose coloured double flowers, scented like a Tea rose.

RENE ANDRE, buds saffron yellow, tinted orange; one of the best.

SWEETHEART, flowers pale pink changing to white, beautiful foliage.

## HYBRID PERPETUAL.

CLIMBING PRIDE OF WALTHAM, flesh colour, shaded with rose.

CLIMBING VICTOR VERDIER, rosy carmine, purplish edges, large and full.

FRAU KARL DRUSCHKI, flowers snow white, large and full; a magnificent pillar rose.

GLOIRE DE MARGOTTIN, brilliant red, very beautiful.

GLORY OF WALTHAM (Wm. Paul), flowers crimson, growth of extraordinary vigour; one of the best of pillar or climbing roses.

MAGNA CHARTA (Wm. Paul & Son), pink suffused with carmine, very large and full.

PRINCESS LOUISE VICTORIA, carmine, shading off to peach colour at the edges.

ULRICH BRUNNER, extra large blossoms of a clear cerise red colour; very handsome.

## NOISETTE.

ALISTER STELLA GRAY, pale yellow with orange centre, produced in clusters.

BOUQUET D'OR, pale yellow, centre coppery, large and full.

CELINE FORESTIER, pale yellow, free bloomer, large and full.

CREPUSCULE, rich coppery yellow, rayed and tinted with nasturtium-red.

LAMARQUE, sulphur-yellow, beautiful, very large and full.

MADAME ALFRED CARRIERE, flesh colour shaded with salmon, large and full.

MADAME BOURSIN, sulphur-yellow, large and full.

MADAME PIERRE COCHET, deep orange yellow, splendid buds.

SOLFATERRE, fine sulphur-yellow, large and very double. WILLIAM ALLEN RICHARDSON, fine orange-yellow, large and full.

## TEA-SCENTED AND THEIR HYBRIDS.

BELLE LYONNAISE, canary yellow, tinted with white and salmon, large, full, and fine.

BILLIARD ET BARRE, rich golden yellow, large, almost full; buds superb.

CLIMBING BELLE SIEBRECHT (Wm. Paul & Son), a strong growing form of "Belle Siebrecht" (Mrs W. J. Grant), very fine.

CLIMBING CAROLINE TESTOUT, a well-defined climbing form of this popular rose.

CLIMBING DEVONIENSIS, identical with the old *Devoniensis* in flower, but of a rapid running growth, and hence valuable as a climber.

CLIMBING KAISERIN AUGUSTA VICTORIA, a vigorous growing sport of this popular rose.

CLIMBING LA FRANCE, a climbing sport producing flowers identical with "La France."

CLIMBING NIPHETOS, white.

CLIMBING PAPA GONTIER, rosy crimson, very beautiful in bud.

CLIMBING PERLE DES JARDINS, pure yellow, a fine climbing rose.

Francois Crousse, bright crimson, sometimes fiery red, large and full.

GLOIRE DE DIJON, yellow, shaded with salmon, very large and full, a superb rose.

GUSTAVE REGIS, canary yellow, centre saffron yellow, long handsome buds.

LADY WATERLOW, salmon rose, edged carmine, semi-double, very lovely.

MADAME BERARD, salmon shaded, large, full, and of fine form.

MADAME CHARLES MONNIER, salmon yellow, a fine rose.

MADAME HECTOR LEUILLIOT, golden yellow shaded ochre-red, large and fine form.

MADAME JULES GRAVEREAUX, buff and peach colour, very handsome, well shaped flowers.

MADAME MOREAU, coppery yellow with deeper centres.

MARECHAL NIEL, beautiful deep yellow, large, full, and
of globular form, very sweet, the shoots well clothed
with large shining leaves.

MONSIEUR DESIR, velvety crimson, shaded with violet, large and double.

PINK ROVER (Wm. Paul & Son), pale pink, with deeper centre; a lovely bud.

REINE MARIE HENRIETTE, a red Gloire de Dijon.

WALTHAM CLIMBER, No. 1. Of different shades of crimson, No. 1 being the brighter and No. 3 the darker. No. 3 is a fine show Rose, and very sweet

# FORCING.

Roses required for forcing will succeed tolerably well if potted early in the preceding autumn. It is, however, obvious that by being potted a twelvemonth previously they become thoroughly established, and in better condition to support an accelerated growth and premature development of bloom. If, therefore, we are anxious to obtain a perfect bloom of forced Roses, and have plants that have been a twelvemonth or more in pots, they should certainly be taken in preference, and the fresh potted ones be allowed to grow on for the natural season of flowering. Presuming, then, the plants about to be forced have been grown one year in pots, we will proceed with our subject.

# FORCING HOUSE.

A span-roofed house, with a longer roof towards the south, is perhaps the best style of building. The interior

may be fitted up according to the taste of the cultivator.

The various systems of heating horticultural buildings now in vogue have been frequently descanted on in the gardening periodicals, and it would be out of place to speak of them here except in general terms. Heating by hot water in its various modes of application is generally acknowledged to be preferable to the old flue system, and in no instance is it more so than for forcing Roses; nevertheless, they will flower well in houses heated with flues. When the latter mode is adopted, syringing should be more freely resorted to; and a pot or two of water poured down on the floor of the house every morning is necessary to keep a moist atmosphere, which is very favourable to forced Roses, and at the same time noxious to the red-spider, which is very likely to appear under the flue system of heating. Arnot's stove, which is used by some, is also found to answer exceedingly well for heating small houses.

# RIPENING THE WOOD.

It is important, with regard to Roses intended for forcing, that the wood be well ripened early in autumn and to effect this end they should be placed in a sunny and airy situation during summer, and should not have too free a supply of water when completing their growth. So soon as they have done growing, the shoots may be thinned out, as previously proposed (see p. 5), the shortening-in of the shoots being deferred till the plants are conveyed into the forcing-house.

# HOUSING THE PLANTS.

The first week in November is an excellent time for this purpose, commencing with a gentle heat the last week in December. It is advisable to keep the plants as close to the glass as possible; and if a gentle bottomheat can be secured, so much the better. At first the fire should be lighted of a morning, and kept in for a few hours only, to throw a little warmth into the house, and no air need be admitted. When the buds begin to swell the heat may be steadily increased till we reach 60° to 65° by day, and the night temperature should never be lower than 45°; a difference of 15° or 20° between the day and night temperature proving beneficial. entering the forcing-house there is discovered a freshness and glaucous hue on the leaves, we may rest satisfied that the atmosphere and temperature are agreeable to the plants. But should the leaves droop and present a flabby appearance, we should attribute this to too dry an atmosphere, or too high a temperature maintained at night. The remedy is easy.

## ADMISSION OF AIR.

In winter and early spring it is well to be cautious in the admission of air, for the young leaves of forced Roses are very tender, and suffer much from the cold. As the season advances top-air may be given for a few hours in the middle of the day in still mild weather with great benefit to the plants; but in cold weather air should be admitted from the lower part of the house only, and if it can be made to pass over the pipes or flue on entering, that it may become more thoroughly amalgamated with the warm air of the house before reaching the leaves, so much the better.

## SYRINGING.

In bright weather the plants should be freely syringed morning and evening; in dull weather very lightly, and once only; soot-water may be used here with good effect.

# INSECTS-MILDEW.

The Green-fly is a great pest among forced Roses, but is easily destroyed by fumigating with tobacco, which should be done as soon as any of these insects are seen, and repeated as often as they reappear. This fumigating is also a remedy for the red spider.

The plan of fumigating usually practised is one so unpleasant that we believe the greatest lover of "the noxious weed" would rather be a spectator than an operator in it. It is, therefore, with much pleasure that we are enabled, through the kindness of a friend, to communicate a method practised by him, by which the destruction of the aphis is accomplished while the operator escapes unscathed. Some sheets of brown paper, the thicker in moderation the better, are soaked in a saturated solution of nitre. These are, after a short period, laid by to dry, and if found to burn freely without flame, pronounced ready for use. On each piece is laid a thin layer of tobacco, and the paper is rolled round on a stick in the way in which music is usually rolled up, taking care to maintain an equal distribution of the tobacco in the operation. The roll is then tied in two or three places to keep it fixed, and the stick being withdrawn, the former is suspended by a wire from any part of the house, so that the lower end nearly reaches the ground. The lower end is lighted, and as the combustion proceeds, the fumes gradually disperse, and the ashes drop on the ground. One, two, or three of these may be used, according to their size, or the size of the house to be fumigated.

Another annoyance is the Grub, with which most Rose-cultivators are too familiar, and whose ravages, if not stopped, will, as well as destroying the leaves and causing the plants to look shabby, materially injure the bloom. Wherever the leaves are curled, or seen sticking together, this insect will be found comfortably rolled up within, and not unfrequently does it ensconce itself in the growing point of a young shoot. The plants must be looked over frequently to reduce these destruc-

tive visitants, and they require to be very closely sought.

Every precaution should be taken against Mildew. the weather be cloudy and wet, a brisk heat should be maintained, that we may not have a cold damp atmosphere. The house ought also to be swept out frequently and kept clean. Probably the close atmosphere in which the plants are necessarily grown during the early part of the forcing season contributes in no small degree to encourage mildew; but it seldom appears till late in the season, when the plants have been in the house some length of time. The application of sulphur is a wellknown remedy, dusted on both sides of the leaves while wet, from a dredging-box; and by admitting abundance of air, and at the same time applying fire heat should the house be damp, to establish a free circulation of air among the plants, the progress of mildew will certainly be arrested. Campbell's Sulphur Vaporiser is a most excellent invention for checking mildew, and should be used where Roses are extensively grown.

# SUCKERS.

Among the worked plants an eye should be had to suckers, which may when young be radically removed by clasping them firmly between the thumb and finger, and drawing them steadily out.

# WATERING.

During their growth and flowering, the plants should be freely watered; occasionally with guano-water, about the temperature of the house; or if worms work in the pots, lime-water is an efficient remedy.

# SEASON OF FLOWERING.

Late in February a few precocious flower-buds will expand. By the middle of March the plants will prob-

ably be in full bloom, when syringing may be dispensed with for a time. A slight shading will be found necessary during the middle of the day, to prevent the flowers flagging, and fire-heat should be in some degree diminished.

A continual succession of flowers may be obtained by removing some of the plants at different periods, as the buds show colour, to a house of a lower temperature. This will also be the means of increasing the size and deepening the tints of the flowers.

Now, as soon as the plants have flowered, such as are termed Summer Roses (those blooming but once in the season) may be removed to a cold pit or house, to make room for the admission of fresh plants kept in reserve for the purpose.

# PRUNING AUTUMNALS FOR SECOND BLOOM.

When the March flowering is over, the shoots of the Autumnal or perpetual-flowering kinds may be cut back. removing as few leaves as possible in the operation, and the plants will give forth a second crop of flowers in fine perfection by the end of May. Many, if not pruned. would continue flowering; but pruning is recommended. if care be taken to remove no more leaves than is necessary in the operation. After April very little fireheat is required, especially if the weather be warm and sunny; and after flowering a second time the plants may be removed from the house, the top of the soil loosened, a little manure spread on the surface, and the pots plunged in an airy situation, there to remain till required for forcing the succeeding year. Thus treated, the plants may be induced to flower well forced several vears in succession.

## FORCING VARIETIES.

The following varieties are of the best description for forcing, and in their selection I have been guided by the same principles before advanced, leaning, perhaps, more particularly to sweetness; at the same time maintaining that it is better to have one first-rate Rose growing in two positions than a greater variety comprising kinds of inferior merit. The asterisk (\*) again indicates the freest bloomers.

## HYBRID PERPETUAL.

- A. K. WILLIAMS, carmine red, changing to majenta, large, full, and of fine form.
- ALFRED COLOMB, bright fiery red, large and full, form globular; one of the best.
- BARONESS ROTHSCHILD, beautiful clear pale rose shaded with white, large and double.
- BEAUTY OF WALTHAM (Wm. Paul), cherry-colour to bright carmine, large and full, form cupped, very hardy; one of the loveliest and sweetest, blooming abundantly.
- \*Captain Hayward, crimson carmine, good form; firstrate.
- CHARLES LEFEBVRE, bright crimson, very double.
- \*CLIO (Wm. Paul & Son), flesh pink, producing quantities of handsome buds and blossoms.
- COMMANDANT FELIX FAURE, rich lake, shaded with black and flushed with vermilion, very showy and good.
- COUNTESS OF OXFORD, carmine red, shaded, very large, full, and handsome.
- CRIMSON QUEEN (Wm. Paul & Son), velvety crimson, a large massive flower, with splendid foliage.
- \*Crown Prince (Wm. Paul & Son), purple, shaded with dark crimson.
- \*DAVID R. WILLIAMSON (Wm. Paul & Son), soft carmine rose, large and full, with smooth firm petals; very free flowering and very fragrant.
- \*DR ANDRY, dark bright red, fine form.

DR WILLIAM GORDON (Wm. Paul & Son), brilliant satin pink, extra large deep petalled flowers. A fine massive Rose, the blossoms produced on stout erect stems.

DUKE OF ALBANY (Wm. Paul & Son), vivid crimson, shaded with velvety black, large and full.

DUKE OF EDINBURGH (Wm. Paul & Son), scarlet-crimson, shaded, large, full, and fine.

\*Duke of Wellington, bright velvety-red, shaded with blackish maroon, centre fiery red; very effective.

ELLA GORDON (Wm. Paul & Son), bright cherry-colour, globular, large and full.

\*Fisher Holmes, reddish scarlet, shaded with crimson.

\*Frau Karl Druschki, snowy-white, large and full, with splendid petals and handsome buds.

\*GENERAL JACQUEMINOT, brilliant red, velvety, large and double.

\*GLOIRE DE MARGOTTIN, dazzling red, large and full.

HEINRICH SCHULTHEIS, pinkish rose, large and full.

\*HELEN KELLER, rosy cerise, free and good.

HUGH DICKSON, brilliant crimson, shaded with scarlet, large handsome flowers of excellent quality.

\*JEANNIE DICKSON, rosy pink, large and handsome.

Louis Van Houtte, scarlet-amaranth and blackishcrimson, shaded, large, full, and globular.

MABEL MORRISON, white, tinted with pink.

MADAME GABRIEL LUIZET, beautiful pink, large and full.

MADAME VICTOR VERDIER, rich bright rosy cherrycolour, large, full and fine form, cupped; blooms in clusters.

MAGNA CHARTA (Wm. Paul), bright pink, suffused with carmine; very large, full and free.

MARCHIONESS OF LORNE (Wm. Paul & Son), fulgent rose, finely cupped, very sweet.

MARGARET DICKSON, white, shaded flesh.

MARIE BAUMANN, bright carmine, large, smooth, and full.

MARQUISE DE CASTELLANE bright rose very large and full.

MERVEILLE DE LYON, white, tinted with rose, very large.

\*Mrs John Laing, soft pink, large and very sweet; firstrate.

MRS R. G. SHARMAN CRAWFORD, deep rosy pink, distinct.

\*OBERHOFGARTNER A. SINGER, very bright carmine, darker in centre; very free flowering and fragrant.

PAUL NEYRON, dark rose, very large, full, and of fine form.

PRIDE OF WALTHAM (Wm. Paul & Son), flesh-colour, shaded with rose, large, full, and very beautiful.

PRINCE CAMILLE DE ROHAN, crimson-marcon.

\*QUEEN OF QUEENS (Wm. Paul & Son), pink, blush edges, large, full, and of perfect form.

SENATEUR VAISSE, bright red, large, and very double.

SILVER QUEEN (Wm. Paul & Son), silvery blush shaded, distinct, and very lovely.

STAR OF WALTHAM (Wm. Paul), crimson, petals and flower large, full, of great substance and perfect form; a grand Rose.

SUZANNE MARIE RODOCANACHI, soft rosy cerise, large handsome blossoms.

\*Ulrich Brunner fils, bright cherry-red; one of the best.

\*VICTOR HUGO, brilliant scarlet crimson, shaded with purple.

VICTOR VERDIER, rosy-carmine, purplish edges; a large showy free-growing Rose, of good quality, and very effective.

VIOLETTE BOUYER, white, shaded with flesh-colour.

## BOURBON.

SOUVENIR DE MALMAISON, clear flesh-colour, edges blush, beautiful, very large and full.

# CHINESE OR BENGAL.

AURORE, apricot-yellow tinted with salmon-rose and carmine; a lovely Rose.

\*CHARLOTTE KLEMM, fiery-red, shaded with cinnabar, semi-double; a very effective Rose.

COMTESSE DE CAYLA, coppery-carmine, shaded with orange and yellow: very rich and effective.

DUKE OF YORK (Wm. Paul & Son), rosy red and white, handsome buds, variable; a beautiful novelty.

MADAME EUGENE RESAL, China Rose, shaded coppery vellow: an exquisite Rose.

QUEEN MAB (Wm. Paul & Son), rosy apricot, shaded orange; a charming novelty, excellent for cutting.

### NOISETTE.

CELINE FORESTIER, pale yellow, free bloomer, large and full.

\*CREPUSCULE, rich coppery yellow, rayed and tinted with nasturtium-red; very bright and showy.

WILLIAM ALLEN RICHARDSON, fine orange-yellow, beautiful colour.

#### TEA-SCENTED.

ANNA OLIVIER, flesh-coloured rose, large and full.

BOADICEA (Wm. Paul & Son), pale peach-colour, delicately tiuted with pink and violet; large flowers of exhibition size; very free and effective, and very fragraut.

BRIDESMAID, clear bright pink, one of the best of its colour.

CATHERINE MERMET, flesh-coloured rose, large and full, exquisite form.

Comtesse Festetics Hamilton, brilliant carmine, with coppery centre; distinct and good.

DEVONIENSIS, pale yellow, superb, very large and full.

EMPRESS ALEXANDRA OF RUSSIA (Wm. Paul & Son), bronzy salmou, opening to rich lake red and shaded with orange; a magnificent Rose.

\*ENCHANTRESS (Wm. Paul & Son), creamy white, shaded buff, as free as a Monthly Rose, and one of the best for winter blooming.

ETOILE DE LYON, saffron yellow, brighter centre.

GEORGES SCHWARTZ, bright deep canary-yellow, shaded with gold; very rich in colour.

GLOIRE DE DIJON, yellow, shaded with salmon, very large and full; a superb Rose.

HONOURABLE EDITH GIFFORD, flesh colour, deeper centre, changing to white, large and full.

INNOCENTE PIROLA, cream colour, centre shaded with yellow, very large, full, and globular.

\*ISABELLA SPRUNT, sulphur-yellow, very free.

JEAN PERNET, bright yellow, changing to pale yellow.

KONIGIN WILHELMINA, rose-pink, Dahlia-like blossoms; very large and full.

LADY ROBERTS, reddish apricot, base of petals coppery; buds very handsome.

LENA, glowing apricot, edges of petals changing to primrose-yellow as flowers expand.

\*MADAME ANTOINE MARI, ground colour rose, freely washed and shaded with white; huds very handsome.

MADAME CHARLES, bright apricot, large and full.

\*MADAME CHEDANE GUINOISSEAU, canary-yellow.

MADAME CONSTANT SOUPERT, deep yellow shaded with peach; a first-rate Rose.

MADAME DE WATTEVILLE, salmon-white, bordered with rose; very fragrant.

MADAME FALCOT, apricot-yellow, showy and free.

MADAME GAMON, apricot, shaded with salmon-rose, base of petals golden yellow; buds long and handsome.

MADAME HOSTE, yellow, large, full, and perfect.

MADAME JULES GRAVEREAUX, a Rose of semi-climbing habit; blooms freely grown as a pillar; flowers fleshwhite, shaded with buff and peach; large and double; first-rate.

MADAME LAMBARD, salmon pink, shaded with rose, large, full, and globular.

\*Marie Van Houtte, pale yellow, often tinted with rose.

Maman Cochet, flesh colour, shaded salmon; a superb
Rose.

MARECHAL NIEL, deep yellow, large, globular, and full, very beautiful.

MEDEA (Wm. Paul & Son), lemon colour, canary yellow centres; a magnificent Rose of great substance.

MORNING GLOW (Wm. Paul & Son), rosy-crimson, suffused with orange and fawn. A brilliant combination of colours; large and full.

MRS EDWARD MAWLEY, pink, shaded with salmon; very large and handsome.

MRS MYLES KENNEDY, silvery-white, shaded with buff with pink centres; a fine flower.

NIPHETOS, snowy-white, sometimes lemon, very large,

\*Papa Gontier, rosy crimson, lovely in bud.

Perle de Jardins, straw colour, centre orange-yellow, large and full.

\*Souvenir de Catherine Guillot, coppery carmine, shaded orange.

SOUVENIR D'ELISE VARDON, creamy white, centre yellowish, very large and full; a splendid Rose.

SOUVENIR DE PIERRE NOTTING, apricot yellow, shaded golden yellow and orange; very large and full.

SOUVENIR D'UN AMI, salmon and rose, shaded, large and full; fine.

\*SULPHUREA (Wm. Paul & Son), bright sulphur-yellow, buds and blossoms of exquisite form; excellent for forcing.

SUNRISE, outer petals reddish carmine, shading to delicate fawn and pale salmon within; a beautiful forcing Rose.

SUNSET, deep apricot colour, free and fine.

SYLPH (Wm. Paul & Son), ivory white, tinted peach and violet; flowers of great substance.

THE BRIDE, white, free and good.

THE QUEEN, white, large, full and good.

WHITE MAMAN COCHET, a snowy white sport of this excellent Rose.

# HYBRID TEA-SCENTED.

ADMIRAL DEWEY, a beautiful light blush sport of Caroline Testout.

Antoine Rivoire, rosy flesh, base of petals yellow; one of the best.

- AUGUSTINE GUINOISSEAU, a rosy-white sport of La France.
- AURORA (Wm. Paul & Son), centre bright salmon pink, paling towards the outside, large, full, and imbricated; very sweet.
- BELLE SIEBRECHT (syn. Mrs W. J. Grant), bright rosy pink, double, of exquisite form; one of the best.
- BETTY, coppery rose, shaded with yellow; rather thin, but fine long buds.
- BILLIARD ET BARRE, buds golden yellow, expanded flowers pale yellow.
- CAPTAIN CHRISTY, delicate flesh pink, large and handsome.
- \*CAROLINE TESTOUT, clear bright rose, large, and double; one of the very best.
- CELIA (Wm. Paul & Son), flowers satin pink, centres deeper, a fine bold flower, exceedingly free flowering.
- CLARA WATSON, salmon and pink, beautiful deep blossoms; fine.
- CLIMBING BELLE SIEBRECHT (Wm. Paul & Son), identical with *Belle Siebrecht*, with strong climbing growths.
- DEAN HOLE, silvery carmine shaded salmon, large highcentred blossoms.
- DORA (Wm. Paul & Son), opening flowers peach blossom colour, changing to silvery blush; large massive rose of great beauty.
- DUCHESS OF ALBANY (Wm. Paul & Son), fine deep pink, in the way of *La France*, but darker; first-rate.
- DUCHESS OF PORTLAND, pale lemon yellow, a very handsome flower of the Kaiserin Augusta Victoria type.
- EARL OF WARWICK (Wm. Paul & Son), rich soft salmon pink shaded with vermilion, a large full flower of beautiful shape.
- ETOILE DE FRANCE, vinous crimson, centre fiery red, large and full, and of good substance; requires to be grown in strong heat.
- EXQUISITE (Wm. Paul & Son), bright crimson shaded with magenta; of exquisite form and fragrance.

FARBENKONIGIN, outside of petals dark red, inside bright red changing to rose as flowers expand; a grand coloured Rose.

FLORENCE PEMBERTON, creamy white, tinted pink, very large and showy.

FRANCOIS CROUSSE, bright crimson of beautiful form, growth climbing.

GENERAL MACARTHUR, bright scarlet red, a fine colour; somewhat flat in shape, but excellent as a forcing Rose.

GLOIRE LYONNAISE, white tinted with yellow, large, full, and of good shape.

GUSTAV GRUNERWALD, rosy carmine with yellowish centres, very showy.

GUSTAVE REGIS, canary yellow shaded saffron yellow, fine long buds, and growth semi-climbing.

Instituteur Sirdey, fine rich deep golden yellow, very effective.

ITALIA, outer petals carmine rose, centre bright salmon rose.

JENNY GILLEMOT, buds nankeen yellow changing to saffron yellow, free and good.

JOSEPH HILL, a magnificent Rose of exhibition quality; colour salmon-pink, shaded with yellow and ochre; handsome buds.

KAISERIN AUGUSTA VICTORIA, colour pale primrose with yellow centre; large and handsome, one of the best.

\*KILLARNEY, rose-colour shaded with white and suffused with pale pink; a fine deep flower.

\*LA FRANCE, beautiful pale peach, rose centre; one of the sweetest and best.

\*Lady Battersea, bright rosy red, tinted with orange; long handsome buds, open flowers thin.

LE Progres, golden yellow buds, changing to nankeen and pale yellow; large, full, and cupped.

LIBERTY, brilliant crimson, fine stiff petals; one of the best for winter flowering.

MADAME ABEL CHATENAY, rosy-salmon carmine, shaded pale vermilion rose, base of petals deeper in colour; one of the most popular Roses grown.

MADAME CHARLES DE LUZE, flesh colour with buffyellow centre; large and full.

MADAME EDMEE METZ, bright rosy pink, shaded with salmon; almost mildew proof.

MADAME HECTOR LEUILLIOT, golden yellow, shaded with ochre-red; large and handsome, growth semi-climbing.

\*MADAME JULES GROLEZ, fine satiny china-rose colour, large and full; sweet and excellent.

MADAME J. W. BUDDE, bright carmine, long pointed buds, developing into well-shaped flowers.

MADAME LEON PAIN, silvery flesh, tinted with vermilion, base of petals yellow; first-rate.

MADAME PAUL VARIN BERNIER, buds and centre of flower deep yellow, edge of petals silvery yellow; beautiful in bud.

MADAME RAVARY, buds golden-yellow, open flowers orange-yellow; rather thin, but a beautiful Rose.

MARICHU ZAYAS, crushed strawberry colour, shaded with light rose; large, full, and imbricated, very sweet.

MARQUISE DE SINETY, ochre-yellow, buds ochre-carmine, a marvellous colour and a fine new Rose.

MARQUISE LITTA, carmine rose, vermilion centre, large and full; a grand Rose.

MELANIE SOUPERT, a fine large Rose, colour salmonyellow, suffused with carmine-pink.

MINA BARBANSON, bright rosy-pink, a beautiful deep flower.

MRS AARON WARD, Indian-yellow, occasionally washed with salmou-rose; large, full, of cupped form; fine shapely buds.

PAUL LEDE, carmine rose shaded with yellow, very rich and attractive; first-rate.

PHARISAER, rosy-white, centre deep salmon-rose; a large flower with fine long buds, splendid.

PRINCE DE BULGARIE, silvery flesh, deeper in the centre; one of the best.

RICHMOND, bright reddish scarlet, of free growth and free-flowering habit; in the way of *Liberty*, but brighter.

\*Warrior (Wm. Paul & Son), buds blood-red, long and handsome, opening flowers vivid scarlet-crimson.

WHITE LADY (Wm. Paul & Son), magnificent creamywhite flowers with very large petals; very handsome and showy.

Some of the varieties above enumerated are very double Roses, and beautiful when forced, although not suited for outdoor culture, the buds seldom expanding clean and fully there. The colours of Roses are much altered by forcing, coming as a rule much paler, especially if a great degree of heat be maintained. The alteration is least visible in the deep and decided colours.

#### STANDARD ROSES.

For conservatory decoration these "tree" roses are most beautiful features when they have attained the age of three or four years. The Tea-scented and Hybrid Tea-scented would furnish the best and most suitable varieties. It is not advisable to have the stems too tall, a height of  $2\frac{1}{2}$  to  $3\frac{1}{2}$  ft. being ample. The plants should be potted from the open ground in October, using 9-inch or 10-inch pots for the purpose. After potting they should be plunged outdoors in a sheltered spot for the winter, and removed to a sunny position for the summer. The following winter they may be brought into the greenhouse or forcing-house.

# LATE FLOWERING.

To obtain Roses late in the season the first point necessary is to keep the plants in a growing state. For this purpose the Autumuals must, of course, be taken; and it has doubtless been observed by all Rose cultivators that many of these Roses produce flowers at the

termination of almost every shoot, or, in other words, if they grow they flower. In the spring of 1843 I shifted about 100 of these from 3-inch into 5-inch pots, selecting the freest bloomers, and plunging them when shifted in the open ground. Through the early part of summer all the flower-buds were nipped out as soon as seen. Notwithstanding the deprivation of the early blossoms, the plants, by continuing to grow, formed fresh flower-buds. Those formed late in the season were suffered to remain, and in September, before frost, the plants were removed to a cold pit, giving all available air by day, and covering with a straw mat by night. They were crowned with flower-buds when placed in the pit; these gradually unfolded, and I cut bunches of Roses up to and beyond Christmas in great perfection. It was certainly a mild autumn; and perhaps a more certain method of obtaining success would be to take the plants at once to the forcing-house, or other greenhouse, where they would probably continue flowering still longer, as the dampness which destroys many of the backward flower-buds in a cold pit might there be prevented. In fact, we have found it proved over and over again that plants prepared in this manner will flower constantly and abundantly throughout the months of November, December, January, and February.

For this purpose such kinds as produce a great quantity of flowers and open freely should be selected; for instance, Bourbons—Armosa, Queen; Chinese—Cramoisie Superieure, Ducher, Fabvier, Mrs Bosanquet; Noisette—Fellenberg and Deschamps; Tea-scented—Catherine Mermet, Corallina, Enchantress, Madame Falcot, Madame Lambard, Marie van Houtte, Niphetos, Sunset, Isabella Sprunt, Papa Gontier, Safrano, Warrior; Hybrid Perpetuals—Crown Prince, General Jacqueminot, La France, and the like, are of the best description.

## PROPAGATION.

Roses are capable of being increased in a variety of ways. We will follow out their propagation by three methods, which will suffice for our purpose—namely, Grafting, Budding, and Cuttings.

## GRAFTING.

Grafting is performed with the greatest success during winter; the whole of January or beginning of February is a very good time. By this method we would propagate the hard-wooded varieties chiefly, the varieties of Rosa Indica being readily and successfully increased by cuttings.

## CHOICE OF STOCKS.

Either the Boursault, Manetti, De la Grifferaie, or Dog-Rose may be used as stocks, selected of various sizes, the greater part about the thickness of an ordinary cedar-pencil, and potted in three-inch and five-inch pots a twelvemonth before required for grafting.

Having admitted the Manetti in our list of stocks, and knowing the popularity it once enjoyed, it appears desirable to make a few remarks in reference to it. principal objection against it lies in the multitude of shoots it produces. Despite of every effort the shoots of the budded stock will push into growth, causing a deal of trouble, and if not closely watched debilitating or destroying the foreign kind. The statement that many kinds grow more vigorously on this stock than on the Dog-Rose is perfectly true; but in reference to the strong growers, Is not their growth when on their own roots as vigorous as can be matured by our not over-sunny Then the vigour derived by the weak autumns? growers is but transitory; it is the result of overstimulation; the system becomes surcharged with food, hence a reaction; debility ensues, and the whole plant

retrogrades. Where, then, are the advantages? The Boursalt was said to be the best stock not long ago, but what Rose amateur prefers it now? The Manetti stock has been tried here for several years and under various modes of treatment, but for the reasons above assigned it is not approved for all varieties or for all situations. The De la Grifferaie, which has also been used here for many years, has gradually risen in favour, especially for Tea-scented Roses. Seedling Dog-Roses, often called seedling briars, have also been used largely, and millions of plants on this stock have been distributed from these nurseries over the last thirty years.

#### SCIONS.

Having our stocks ready, we proceed in search of scions. The hardest, best ripened wood should be chosen, and cut into lengths of about two inches. Two, or at the most three, buds are sufficient for each scion.

## MODES OF GRAFTING.

Wedge-grafting is a favourite method on the Continent, but Whip-grafting, and the simplest form of it, is easier of application, and quite as successful. Under this mode the stock should be cut down as close to the pot as the leaving a smooth portion to graft upon will allow. It is of importance that the stock and scion be of nearly the same size, and each should be cut in an oblique direction, taking care to make the cuts of the same length and even, that the bark of the scion may fit exactly upon the bark of the stock. The two should then be bound firmly together with soft bast, taking care not to displace the scion in the operation.

# GRAFTING COMPOSITION.

It is now necessary to exclude air and water from the point of junction with stock and scion, which may be done by melting the following ingredients together over a slow fire, and laying on the composition while warm with a flat stick:—

> Five-eighths Black Pitch. One-eighth Resin. One-eighth Tallow. One-eighth Bees'-wax.

This composition becomes hard when cold.

# GENERAL TREATMENT OF PLANTS.

The newly-grafted plants should be placed where a steady bottom-heat can be maintained. The eyes of the stock will vegetate in abundance, but should be kept in check until the stock and scion are firmly united and the latter pushed into growth, when they may be entirely eradicated. A shoot from the stock, growing at the place of union, will be very serviceable in drawing the sap upwards to the scion; but it should not be allowed to grow too long or it will be at the expense of the latter. When the scions first shoot it is necessary to pass a mat over the frame or house to protect them from the sun, or the young and tender leaves will be withered up, and the scions probably perish. When the shoots are three or four inches long the plants may be removed to a cold pit—still shading and admitting air cautiously—where many of them will bloom well the same season. to flower in heat they become drawn and weakly, and the flowers thin.

# BUDDING.

The operation of Budding has been so much written on, and is so generally understood, that it appears quite unnecessary to enter into the details of performance here. The stocks which are intended to be budded should be potted in the previous autumn in five-inch and six-inch pots, or they may be budded as they stand

in the ground, and potted afterwards early in autumn while the buds are still in a dormant state. healthy young stocks should be selected, varying in height from six to eighteen inches; they should be looked over once or twice to remove any superfluous buds that may push; for two, taking an opposite course of growth, are sufficient, and by the removal of the supernumerary ones these will grow stronger. In July, or as soon as the bark runs freely, they may be budded, or they may be budded in the main stem if preferred; and about three weeks afterwards the bast or worsted should be removed. The buds should not be encouraged to break until the spring, or they will probably be injured by the frost in winter. In autumn or spring they may be potted into eight-inch or nine-inch pots in the compost previously recommended (p. 6.)

#### MANAGEMENT OF BUDDED PLANTS.

In spring, when the buds have shot a few inches, the growing points should be nipped out, by which means lateral shoots will be formed, the Autumnals flowering freely the same season—many, in fact, almost as well as at any subsequent period. The Summer Roses will not usually bloom till the following year.

## BUDDING TWO KINDS ON ONE STOCK.

If, in budding, we wish to unite two or more kinds on one stock, we should take care that the buds be taken from plants of the same habit and strength of growth. Thus Noisette: Aimée Vibert (white) and Fellenberg (crimson) would class well together. Bourbon: Queen (fawn) and Lorna Doone (crimson). Tea-scented: Niphetos (lemon) and Catherine Mermet (rose). Chinese: Mrs Bosanquet (white) and Fabvier (crimson); and the like.

#### CUTTINGS FOR ROSES ON OWN ROOTS.

Propagation by cuttings may be performed with success all through the growing season. As soon as the forced plants have bloomed, the shoots taken off, when pruning for a second bloom, may be cut to a joint with two or three eyes, allowing the leaves to remain on all excepting the bottom eye intended to be inserted in the soil. About six of these cuttings placed round a a four-inch pot, in equal parts of loam, leaf-mould and sand, will be sufficient. They should be placed firmly in the pots, and afterwards well watered through a fine rose, then plunged where they will have a moderate bottom-heat and be shaded from the mid-day sun. In a few weeks, when rooted, they may be potted separately into three-inch pots, and gradually hardened off. The same soil (p. 6.) may be used as before, but broken up fine, or sifted, with the addition of a little Cuttings will strike through the summer, and manure. at any period when the young wood can be obtained well ripened. They may be taken as late as September, but must then remain in the cutting-pots during winter, and be potted off early in spring.



#### THE

# Autobiography of a Pot-Rose.\*

#### CHAPTER I.

PROPAGATION—EARLY GROWTH—CHANGE OF HABITATION.

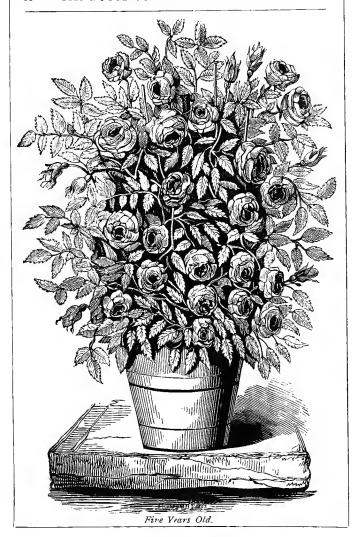


WRITER of no mean authority has said that whenever an individual essays to speak of himself we should listen with attention, as we may almost invariably gather from his remarks an insight into his character and nature. It is because I believe in this opinion

that I am about to relate my own history; and if, by withdrawing the veil, the public, knowing more of my nature, should think less favourably of me, I shall at least have the satisfaction of having dissipated a false reverence, upheld only by seclusion, and my associates and admirers may be gainers by the light of truth thus reflected on my path. Heroes and hero-worship! I advance no claim to be ranked among the former, and am not naturally inclined to idolatry of any kind. If my autobiography, plainly and honestly written, should establish anything, it will be simply this, that I am a successful Pot-Rose.

Much that occurred for the first few weeks of my existence at Pottletown is, of course, not very vividly before me; and lest I should mislead, by genealogical

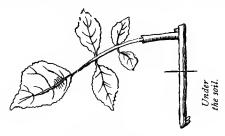
<sup>\*</sup> This autobiography, originally written for *The Florist*, in 1853, is revised and reproduced here by the request of valued friends.



accounts derived from, and perhaps concocted by, others. I shall commence the story from the period of my own consciousness. I distinctly remember existing as a short branch, terminated by a flowering bud, in company with other branches, on what was termed the parent tree; and although deriving sustenance from the parent root and through the parent stem as well as from the delicious air with which I was surrounded. I had a certain sense of my own independence,-of my capability of becoming a separate individual, and being in after-times the main stem whence should arise branches like myself. As I heard one and another bestow a passing word of praise on the freshness, beauty, or fragrance of my flower, reserving the comble de gloire for the plant on which I grew, I longed for the time when my master, who was a nurseryman, should see fit to detach me from my parent and place me in the state of a cutting, to begin life entirely on my own account.

Accordingly, one morning, just as my flower had dropped, I heard with joy, as he gently pressed me between his finger and thumb, that I was "ripe enough," to use his own words, and that on the morrow I was to become a cutting. As the preparation for the coming event was made beneath my own eyes, I shall relate, as briefly as possible, the bare facts, not troubling the reader with my hopes, fears, and aspirations, which may be more easily imagined than described. First of all was brought into the house where I grew about a peck of pure yellow loam, chopped fine, but not sifted; it appeared to have been the top-spit of an old pasture, cut and laid up to dry and air some months previously; the next material was about half-apeck of decayed leaves, technically called leaf-mould: and next about a quarter of a peck of white sand. materials were laid on a flat board and thoroughly mixed together by turning them frequently with a

small spade, and were then pronounced ready for use. I now saw a quantity of pots brought in, of the size called large sixties, and a boy followed with some broken pots under his arm, some brickbats, and a hammer. He began breaking the damaged pots into pieces nearly the size of the bottom of the "sixties," and put one piece, the concave side downwards, over the hole of each pot; he then broke the bricks into pieces about the size of a nut, put a handful over each piece of crock, and filled the pots with the soil previously prepared, pressing it down rather firmly, and striking it



A Cutting made.

off level with the top of the pot with his hand. I now made a pretty shrewd guess that into one of these pots I was to go; and with an exulting heart (ah! I little knew then what I had to go through before attaining that separate and independent existence I so much longed for) I saw my master approach with a little white-handled knife in his hand, and before I scarcely knew it I was severed from the stem. After the debris of my flower was cut off, there remained two leaves; the upper one was left intact and the lower removed; my stem was then cut straight, just below where the bottom leaf joined it, and I was a cutting "made." The above woodcut represents, as nearly as I can remember, my appearance at this early epoch of my career.

I was now inserted, in company with three others, in one of the pots previously described. A hole was made in the soil at the side of the pot with a dibble, about the size of an ordinary cedar pencil, and the lower twothirds of my length was placed firmly under the soil. The pot was then removed to a frame with a gentle bottom-heat, and plunged to the rim in sawdust. the first few days I suffered greatly, owing to my old sources of nourishment being cut off, and having as yet no power of appropriating the new ones at my disposal. I could scarcely drink or breathe, and an almost insufferable languor and faintness oppressed my frame. Pot-Roses in posse, cherish and value, while you possess them, the ties and privileges of attachment to the parent stem! I am free to confess that I often looked back and longed to regain them. I am sure, if my master had not exercised the greatest care and watchfulness over me, I must have died; and I resolved, if I recovered, to show my gratitude by throwing blossoms and odours around his dwelling all my life. He kept a tank of warm water flowing beneath me night and day, by which means not only was the soil in which I was placed made warm and comfortable, but a moisture arose and adhered to the under sides of my leaf, which proved peculiarly refreshing. Whenever the sun burst upon me, threatening in my then state to exhaust me of my juices, he ran with a mat to afford me shade; and he further refreshed me morning and evening with a dew-like shower, thrown through a fine rose syringe. In about eight days the juices exuding from the top and bottom of my stem had formed a callus: and a few days later white porous roots began to form, with sponge-like points, that sucked up the moisture from the soil, and I felt my almost exhausted strength rapidly recruiting. master now allowed a little sun to fall on my leaf in the morning, and admitted a little air into the frame

in which I had been closely shut for a fortnight. By this treatment my strength became so great and my roots spread so rapidly that the eye in the axil of my leaf began to grow, and in a month after I was separated from my parent I was shaken out of the cutting-pot and. placed in a pot of the same size by myself, in a soil something similar, but with decayed manure instead of leaf-mould, and about one-fourth the quantity of sand. I was thus separated from my companions, one of whom had died a cutting, not having been sufficiently ripe when taken; one had not yet rooted, having been too ripe; and the fourth was placed in a separate pot like myself. I had now attained the first step in my career; I was independent and alone, free to act as I liked. was now carried back to a frame with bottom-heat. syringed with water morning and evening, and shaded from the sun as before. For the first two or three days very little air was admitted; but after that time more and more was given me every day, the shade was made lighter by degrees, till at last the frame was entirely removed, and I was exposed to the sun and air night and day. It was now July, and the growing season was before me. My first anxiety was to show my gratitude to my master; and being of the kind called "autumnal," by the third week of September I produced three not over large but finely-shaped and highly-coloured flowers. "Bravo! cried old Mr Sleek-and-thin, the nursery foreman, as he caught sight of me when poking about one morning to pick up the most tempting plants to bring to the front-"bravo! three flowers."

As the nursery in which I grew was much visited by lovers of flowers, I heard many high encomiums passed on me; and one evening I was purchased by a country squire—Mr Whitaker—a piece of white paper was tied round my pot, and I was placed inside his carriage; and I, who before had only lived, now lived and moved, I

knew not whither. I was sorry to go, but it was gratifying to me to see how my new master gazed on me, handled me, and inhaled my attar-breath, regarding me, as I thought, with more than usual interest, because he considered my destiny altogether changed in his hands. For my part I resolved to do my best to please him, as I had done to please my former master. Soon the carriage stopped at a plain country-house in the village of Cheerup. I was handed out, passed through the hall and dining-room, admired by the servants and ladies, and placed by my master in the conservatory. I now looked out of all my eyes (for by this time I had several). and had not been long here before I saw a red-faced. happy-looking man, without a coat and with a blue apron, coming towards me with a watering-pot. as I afterwards learned, was John Oakpost, the gardener, to whom I took at once, and fortunately he took to me; and of him I shall have more to say by-and-by. master met him close by me, and a conversation immediately ensued, ending by John (who was a Scotchman) expressing himself highly pleased, but wishing I had been a "wee bit bigger." My vanity was, however. gratified and the flame of my ambition fanned by my master replying, "Ah, well, the highest destinies have but small beginnings."

When I had shed my flowers I was taken out-of-doors; and a frosty night having denuded my branches of their leaves, I was removed to a cold dry pit for winter quarters.

#### CHAPTER II.

GENERAL CULTURE—PRUNING—MANETTI STOCK—PREPARATION FOR FORCING.

THROUGHOUT the winter months I gave very little trouble, although I received every attention that was necessary. The soil about my roots was kept rather dry; sometimes I did not receive any water for a fortnight together, for John the gardener knew well that, as my roots were in an inactive state, such a stimulant would prove injurious rather than beneficial. When the weather was fine the top of the frame was pulled off so that I was fully exposed to the sun and air: and if wet it was so tilted that a circulation of air was admitted though the rain was excluded. When the weather was frosty the frame was kept closely shut, and sometimes at night a straw mat was drawn over the glass. Thus I passed my first winter in company with other plants; and when the spring arrived my powers were so invigorated by the rest I had undergone that I felt prepared to grow and blossom with unusual vigour. Early in March I was pruned. I had seven shoots, four strong ones placed at about equal distances, and three weaker ones rising between the former, The latter were cut off close to the main stem, and the remaining four were shortened to two eyes each, so that I might produce eight blossoms in June, which were considered a sufficient number for my size and strength. months after this I was placed in a larger pot, of the size called 48, in the same soil as that last used (pp. 67, 70) and plunged on the top of a dung-bed, without any frame. The warmth thus generated about my roots stimulated them to feed and grow, and the increase in the size of my branches was proportionately great. Eight flowers was the number actually produced; and I need not say that I received a liberal supply of weak liquid manure from the commencement of growth till their development. "Well done, young'un!" said John, as he stopped to look at me one evening; "if you go on at this rate you'll make a topper some day."

When my flowers were shed the supply of water was again diminished, which was quite in accordance with my feelings: for after so much exertion I required temporary rest. I remained inactive for about three weeks, when I was again potted into a larger pot, this time No. 24 (8-inch); again freely supplied with water, and stimulated by bottom-heat to a new growth; and I produced in September no less than twenty flowers, which, if of smaller dimensions than those of the summer growth, were pronounced superior in shape and colour. I now saw that my master began to grow proud of me: he brought all his friends to see me, and when he found them interested in my appearance he gave them my history in brief or detail, according to the humour of the moment. Some I saw smile at the earnestness with which he spoke of various matters; and one young gentleman, a philosopher I think they called him, and who seemed to me to possess a larger share of conceit than of good breeding, said gravely, shaking his head, that it was monstrous for a reasonable man to occupy himself so earnestly with such trifles; that "the proper study for mankind was man." My master, who was a man of most amiable and even temper, smiled, and calmly replied, that gardening was his recreation, and as such it vielded him an amount of health and calm enjoyment which he would not exchange for the purple of an emperor or the riches of the Sacramento. As my master's garden was celebrated for many rare and fine things, it was often the resort of certain savans of horti-The gardener, John, was not himself of that class. He was a plain shrewd practical man, honest and skilful, not dogged and adverse to new things or new

schemes because new, but averse to replace old by new without satisfactory evidence, before testing the latter by experiment. I often heard some well-fought battles between John and the savans: and while the savans talked the best, it seemed to me that John knew most of practical gardening. Of this I felt sure, after hearing John argue one night with one of these célèbres, a General, to whom my master appeared to pay great deference on the subject of Rose-growing. A new stock from Italy was the subject of discussion—I think they called it Manetti. John was told this stock was to surpass all other stocks. When hudded on it Roses were to grow twice as fast as in any other way, and never to spawn or sucker: the most shy and delicate were to become free and robust even on the poorest soils; and, in fact, the sooner every other rose was rooted out of the garden and replaced by roses budded on this the better. As the General spoke of his own experience, and was wholly disinterested in the matter, my master became a convert. I trembled when John quietly said, "Let us try this stock first, and if it prove equally good on our soil, we can then replace our other roses by it." My master seemed to think this course reasonable, and, liking to humour John, adopted it; and that he was well pleased with his decision the sequel will sufficiently show.

This has led me to a rather serious digression. To return. My September flowers had fallen, and I learnt that next year it was the intention to "force me"—that is, to change my seasons, so as to develop my first blossoms in March instead of June. To this end the pot in which I grew was laid on its side, so that I might get no water naturally or artificially, but sink rapidly into a state of rest. This I did, and was pruned and conveyed to a cold pit, there to wait till the last week of December, which was the commencement of the forcing season. The operation of pruning this winter seemed much more difficult than before; I had a great number of branches, some weak and some strong, some well and some ill-

placed. It was evidently a puzzle, even to John, what to do for the best; and he walked round me, and looked at me for some time before he could make up his mind to begin. At last he seemed to have decided which shoots should remain; and he began removing the others carefully, one by one, till only twelve were left—one tall shoot in the centre, and the others disposed around it at about equal distances. These shoots were then shortened; on the strong ones were left about five eyes, and on the weak ones two or three, and I was pronounced pruned ready for forcing. My appearance when pruned, at the end of my second year's growth, was something like that represented below, which portrait was taken when a year older.



Three Years Old, Pruned.

#### CHAPTER III.

I AWAKE!—TEMPERATURE OF FORCING-HOUSE—GREEN-FLY—MILDEW—I BLOOM—STAND FOR MY PORTRAIT —I BLOOM AGAIN—AM SHIFTED—FUTURE PROSPECTS.

Heigh-ho! Where am I, and what has been the meaning of so much bustle, of which I have a somewhat indistinct though certain recollection. Ah! now I understand it all. I have been half asleep, and am only awakened to a state of thorough consciousness by the playing of a shower of milk-warm water over my naked branches. It was a frosty morning in December; my winter had already passed; I was in the forcing house; John was using the syringe, and a most genial vapour rose from the pipes as some few drops of water fell upon The wind was blowing keenly from without, and them. the snow was trying hard to find some crevice through which to enter, as if seeking shelter from the driving blast. But in vain! John held the maxim that "what was worth doing at all was worth doing well;" and he saw with satisfaction from within that he had proved more than a match for frost and snow; they were excluded, and I was safe.

Not to mislead my readers, or to lay myself open to a charge of egotism, I may, perhaps, be allowed to say that I was not alone. My companions were various: there was the bashful Moss, the sturdy Hybrid Chinese, the fragrant Hybrid Perpetual, the clustering Noisette, the ever-blooming Bourbon, and the delicate-coloured Teascented, of various shades, all ready to spring into life and beauty; but as it is enough to tell one's own tale, I shall merely relate what pertains to myself.

It was still winter (January) with the Roses out-ofdoors, but spring had commenced with me; the temperature of the forcing house in which I had been placed was 50° by day and about 40° by night. It was not, however, suffered to remain long at this point; gradually the heat was raised by 10°, and the syringe was used every morning, sparingly if the weather was damp, and freely if sunny; and in some rare instances, if the day happened to be calm and genial, a little air was admitted for an hour or so. When my first leaves expanded I was indulged with a little weak liquid manure, and this was increased in strength and quantity as my leaves grew and multiplied. The house was swept out at least twice a week, for another of John's maxims was that "cleanliness was next to godliness," and everything around me was so neat and comfortable that I began to think I had arrived at the summit of plant-happiness, when suddenly there came, from where I know not, a minute insect (Aphis rosæ), the colour of my leaf, which caused me great pain and annoyance. At first I looked upon her as a mere visitor, attracted hither by the warmth and comfort of my dwelling; and though it was irritating enough to have her stalking over the still delicate membrane of my leaf, this I might have borne on account of good-nature. But, alas! I soon found that not only had she made up her mind to dwell on my leaves, but also to live on my juices. Puncture after puncture was made with rapid succession, and soon a host of young ones rose to join in the attack. A few days only had elapsed since the appearance of the first of this numerous race; but their voracity was so great that my roots could not meet the demand thus made upon In vain I twisted my leaves; the more languid the supply, the more violently did they suck my juices. and my health began to decline, when one day the door opened, and John, whom I had not seen for some time,

came hobbling in with a stick. With a single glance of the eye he saw how the case stood, and forgetting his rheumatism, he dropped his crutch, and hopped out of the house, shouting, "Jacob—green-fly—tobacco!"

Dire was the commotion; for when John spoke he was listened to and minded, and soon a young man entered the house with a pair of bellows, and a flower pot filled with something from which ascended a great smoke, and as it curled and twisted around my leaves, these miserable marauders gradually relaxed their grasp and tumbled into the abyss below. Oh, what a relief to me! The next morning I was syringed more freely than before, and the sensation I experienced was more than ever delightful. I cannot say that I liked the tobacco smoke of the preceding evening, though I heard the young man who was puffing it with the bellows say it would "do me good;" I believe, however, that it did me no harm, and it was a cheap riddance of so dangerous an enemy. All now went on well for a time, when I was subjected to a fresh annoyance. Owing to the damp cold weather, John could not give me enough of fresh air, and the atmosphere of the house became rather As a consequence, a parasitical plant called humid. mildew fastened on one or two of my young leaves; but he was soon put hors de combat by being smothered in Again and again did fresh generations of green-fly attempt to gain a footing; but John, who was now well again, and ever on the watch, quickly dispersed them with a few whiffs from his tobacco pipe. passed safely through the trying season, and grew and March had now arrived; my spring was now merging into summer, and I was a pyramidal plant, covered with flower buds, the sepals just parting and showing the brilliant tint between the segments of green. I had before only excited John's praise, but now the house resounded with exclamations of delight; and.

to speak the truth, I believed every good word that I heard said of me.

I became a great favourite with the young ladies of the establishment, and they one day brought their



Three Years Old and in Bloom.

drawing-master—Mr Sketcham—to see me. My beauty and symmetry so delighted him that he obtained permission to take my portrait, which he said he would send to the Editor of the "Florist"; and so thoroughly was I impressed with myself at this epoch of my career that it is a small effort of the memory to reproduce it

here. The illustration (p. 79) shows my form and stature at this stage of my existence.

But to return. I was again in bud, I blossomed, and my flowers once more strewed the ground. My seed vessels were cut off, and I was left in the same house. only more air was now admitted. I was watered frequently and fumigated occasionally, as before; the surface of the soil in the pot was sometimes loosened, and I flowered again early in June.

My branches were now perfectly ripened and my pot full of roots; I had gone ahead of all my contemporaries, and was pronounced the first rose of my age. I was shifted into a larger pot, in rich coarse soil, and was carried out-of-doors, the pot plunged half its depth in the ground, in a situation freely exposed to sun and air. I was subjected to the same routine of culture for another year, at the end of which my master suggested that I should be exhibited the following year (see p. 89).

Well-a-day! well-a-day! Few of you young Pot-Roses whom I see around me know or care to what summits of greatness you might aspire! You never look forward to the future; you are wholly engrossed with the comforts and enjoyments of the present hour. Careless and gay companions, listen to me. Repress your carelessness. Moderate your gaiety. Take for your motto, "Upwards and onwards," and think of me. I, an obscure cutting, destined to become an Exhibition Rose!—to bide 'neath gay and parti-coloured tents! to blossom in the presence of royalty! Impossible! yet such is really the intention. A bright sunny morning gives John an unusual flow of spirits, and I hear him so communing with himself while sharpening his knife preparatory to pruning me for the purpose.

### CHAPTER IV.

I AM PRUNED FOR EXHIBITION—CONVEYED INTO THE EXHIBITION-HOUSE—TIED DOWN—EXCITED TO GROW
--TIED OUT—SHADED—BLOOMED—VISITORS—MANETTI STOCK.

And John did prime me; for he said, as he cut quite half my branches away, and shortened those he left to two or at most three eyes, that I was one of that sort that required clos, pruning. But when he had finished me, I saw him hass to my neighbour, who was of a looser and more diffuse habit than myself, and with him, after thinning out he left from four to seven eyes on each shoot. As we both grew and flowered well at the same time, he was no doubt right in thus varying his practice.

No sooner was I pruned than I was carried with the rest into the exhibition-house, a beautiful new structure reared expressly for our use. There were twenty-four of us, for although only eight were required at the show, I heard John say it was necessary to have this number to make sture of eight being in full bloom on the show-day. In this Jacob Shipshape—John's alter egowho in early life had run off to sea, but returned the first convenient opportunity because "he didn't like it" -acquiesced, saying, "It wasn't worth while to risk the ship for a ha'porth o' tar." Jacob was always obedient to orders, and had consequently acquired the privilege of expressing his opinions pretty freely. I was not a little proud of the improvement in my position, the house I now inhabited being so much finer than the one in which I had lived the year before. It was a spanroofed house, the faces looking towards the east and west. A double row of hot-water pipes ran all round the interior; the top-lights on one side slid up and down, and all the side-lights were n ovable to command a free supply of fresh air.

It was early in December, about & fortnight after I had been pruned and brought into the house, that the first signs of winter appeared; it snowed very hard, and this brought John in-doors, not that he cared for a little rough weather, but that he considered he might, under such circumstances, be more usefully employed within. He had a skein of bast in his hand, and began work by tying a strong ligature of this material beneath the rim of the pot in which I grew. He then tied the ends of my strongest shoots, and brought them down from the perpendicular position in which they grew to a horizontal one, fastening the bast to that passed beneath the rim of the pot. Jacob assisted, and when all was finished he said he thought I was pretty well "rigged out." For although he never alluded to his first and only sea-voyage, he had thereby added to his vocabulary certain nautical phrases which he used unconsciously. This operation wrought a curious change throughout my whole system. The sap, which was just rising, and flowing strongly towards the tops of my leading shoots. to the impoverishment of my lower ones, was now more equally distributed, and I felt the benefit of the change. As the winter proved unusually mild, no fire-heat was applied till the last week in February, when it was thought time to begin in order to bloom me early in May. Hitherto I had received abundance of air and but little water, that I might continue in a state of rest. John came in one morning soon after the artificial heat was begun, and wrote up something in the interior of the house, which almost everybody who came in afterwards had the curiosity to read; it was, "N. 45°; D. 55°; Syd., May 8,"-signifying that the night temperature

was to range about 45°, and the day temperature 55°, and that we were to be exhibited at Sydenham on the 8th of May. The former was for the guidance of Jacob, who attended to the fires; the latter for his own, that time might not slip away unnoted. The treatment I benceforth received was almost the same as that of the previous year, only the temperature was some degrees lower. Thus February, March, and the first half of April passed away, and my flower buds were just showing colour. I had grown remarkably tall and handsome, and become a flourishing young plant. My next neighbour but one was already in bloom; but the others were still, like myself, only children of promise. Such of our master's friends as had seen our progress of late (I can no longer speak of myself as disconnected from my companions) had spread our fame abroad, and it was rumoured that numerous applications would be made to see us. One of John's friends who had been accustomed to win the gold medal at the exhibition, called about this time, and frankly owned himself beaten, saying, good-humouredly, that he should try hard to recover his position next year. Notwithstanding the excitement arising as the show-day drew near, John "kept the even tenour of his way," knowing well the prize was not his till won. As the buds prepared to expand, he drew a thin canvas shade over the glass, to break the sun's rays, and syringing was now dispensed with.

Time passed on, and it wanted but two days to the show, and it was the last day of receiving company, as my master did not admit visitors to the garden the day before the show, because John was too much occupied in getting us ready to pay them proper attention. I have said it was the last day we were to be seen prior to the show, and the company was thronging to and fro from morning till night. Among others I was not a little delighted to recognise my old friend the General, who two

vears ago had counselled our destruction in favour of the Manetti. The General was an exact man, and fond of uniformity; he used to prune his own Roses, and would cut their heads off right and left, without reference to good practice, in order to keep the whole on a dead level. Oh, how often I had wished that he would come and see us now! Well, he came, and brought his gardener Simon, a young man, with him; and I listened attentively to the conversation that took place, hoping to hear something of my rival the Manetti. But in vain. John spoke, the General spoke, and Simon spoke, but not a word fell from any of them concerning the Manetti stock. After examining us individually, my master and the General quitted the house, while John and Simon were left standing opposite to me. Each looked significantly at the other for some time without speaking. John, as I afterwards inferred, was waiting his opportunity to inquire of Simon the success of the Manetti stock, while Simon was wishing to draw from John the principles of culture by which he had developed such magnificent plants.

Simon at length broke the silence, and the following colloquy took place:—

Simon. Wonderful! I couldn't have believed it; though, to be sure, everybody in Cheerup and Pottletown has been talking about 'em for weeks; and Mr Leek, the nurseryman, said it was a horticultural triumph. They say "it is better to be born lucky than rich;" and you, no doubt, have found out some wonderful manure, or some secret, which you will keep for your own use, and I don't blame you.

John. Stop, stop, my young friend; not so fast. I have no faith in luck, and have no secrets.

Simon. Well, I can't understand it, then. But of course we can't expect you to tell everybody if you have.

John. Perhaps some people might call it luck, and some might call it a secret; but you see I have no roses on Manetti stocks.

Simon. Oh, pray don't say anything about that in master's hearing, for he has become almost tired of Rosegrowing through the introduction of that abominable thing.

John. How; doesn't it grow well?

Simon. Grow well! Yes, too well. It grows so well that unless we check it continually it starves all the finer varieties that are budded or grafted on it.

John. But are not the young plants fine?

Simon. Yes; fine the first year, but seldom afterwards. With us ground-shoots spring up in quicker succession, and ten times more numerous, than from the Dog-Rose; and no amount of watchfulness on my part could prevent the exhaustion of the sorts budded on it.

John. The stock has been successful, then, if the sorts budded on to it have failed. But do they not say it is more excitable than any other stock, and that Roses break and blossom earlier on it.

Simon. Excitable! Yes. Last spring my roses broke a fortnight earlier than other people's, and were frosted in consequence, while theirs remain unscathed.

John. Still, as they say it has no thorns, how delightful it must be to be able to bud Roses without pricking one's fingers.

Simon. No thorns, eh! Well, if I was at home my coat would testify to the reverse of this; and in the summer my torn fingers. Why, it is the thorniest of all stocks. But as we are going to throw them all away, if you would like to try it, I will send you some.

John. Thank you; but I must no longer conceal the truth. I have already tried it. I wanted a confirmation or contradiction of my conclusions, and your opinions are in exact coincidence with my own. It is, I believe,

a very good stock for roses under *special* circumstances, but it is not the stock for *general* use.

Simon. You surprise me! But here is my master; and before leaving, "Have you really no secrets in growing these Roses?"

John. None but what I am willing to communicate to anyone who wishes to know them. Gardening, to be successful, must be a labour of love; and the advancement of it as an art should never be lost sight of.

In continuation, John explained to his young friend how, years ago, he began by reading from the most authentic sources, and worked in with his own ideas what his judgment approved. Thus, aided by close observation, he founded a complete theory on which he built his practice. That practice I have already detailed in this autobiography. "Luck and secrets, young man," added John, "are only idle men's excuses. Knowledge of first principles, experience, care, watchfulness, and labour, are the grounds of success in every branch of culture." Simon departed, apparently treasuring in his memory these last words of John, whom he seemed to regard as a Mentor in gardening.



#### CHAPTER V.

I AM WASHED AND DRESSED FOR THE SHOW—JOURNEY
TO SYDENHAM—ARRIVAL, AND INCIDENTS THEREON
—RESULTS OF THE SHOW—COMPANY—MY RETURN—
MORE COMPANY AT HOME—THE PHILOSOPHER—
STUDY OF MANKIND AND BUTTERFLIES—JACOB'S
DREAM—GUMMING—CONCLUSION.

EARLY on the morning preceding the Show John and Jacob came in and selected ten of us. I need hardly say that he chose such as were in fullest and finest bloom, and it was highly gratifying to me to find myself the first fixed upon. I was carried into the shed to be washed, dressed, and "packed:" my leaves were sponged, my shoots carefully tied up, and I was then packed in a covered van with my companions, who had been similarly treated, and delivered over to the charge of Jacob, whom John told ten times over to let old Dobbin walk gently, that he might not shake us. Notwithstanding this precaution on the part of John, I found myself, as usual, none the better off for being transferred from his care. Jacob, though clever and attentive, was young, and so elated was he with his first journey to Sydenham, and the auspicious circumstances attending it, that, unknown to John, he took his cornopæan with him, and no sooner was he "clear off" than he began to play his favourite village airs. Old Dobbin, who had been a trooper in early life, was soon on his mettle, and would prance and caper despite of Jacob's earnest efforts to restrain him. Fortunately, the cessation of the war-notes and a little coaxing brought him to a stand, not, however,

till my buds and blossoms had been shaken within a hair'sbreadth of snapping. Jacob, pale with fright and hair on end, looked into the van, and pushed his horn under the sawdust in which we stood, apparently thankful that matters were no worse, and the rest of our journey was pursued in ease and safety. On reaching Sydenham we were carried from the van to the tent on hand-barrows: but, alas! when we arrived there the tables were covered with plants, and we were set on the grass inside the Here we remained about an hour, buffeted by every passer-by; first a coat-tail swung round and knocked off one of my buds (Jacob remarking that exhibitors in tail-coats should pull them off before walking among exhibition plants, and wishing them at sea, the worst wish he was capable of uttering); then a leg brushed me, bruising both leaves and flowers, and I sustained more injury in that short period than during the whole journey from Cheerup to Sydenham. Indeed, I never spent so unhappy an hour in my whole life, for, apart from the unpleasantness of my situation I saw John's long-sustained labour ruthlessly endangered. seemed there was a dispute about the spaces. John's competitors had arrived at the show first, and. finding John's roses better than his own, had spread his over a larger surface than usual in order to squeeze John's tight in a corner. But Jacob was not to be outmanœuvered so; he argued, grew angry, and less wily than his antagonist, visited him with the expressive but disrespectful and impolite term of "dodger," wished him at sea, and was preparing to back his arguments by physical force when John opportunely arrived, and, as usual, brought peace and satisfaction in his train. understanding the question he appealed to the fairness of his competitor; but meeting with no response he went direct to the authorities. The result was, John's argument was pronounced sound and fair, and each had



At the Show.

allotted to him his rightful space. But the movement had been artfully contrived, for it left John but half-anhour to prepare for the Judges, and had the plants been of nearly equal merit the loss of time might have been fatal to him. As it was, John won the prize, and the "dodger," to use Jacob's words, "hooked it:" that is, he went off, and was seen no more that day. I could relate many wise and important things which the Judges said when settling the awards, but as they were said "under the rose," I feel in honour bound to silence, sad as the loss may be to the floricultural community. I cannot help saying, however, that one of them, a rough-looking man, said I was a "stunner." The company in general admired us very much; and the Prince of Gardeners said of me that I was the finest specimen of a Pot-Rose that he had ever seen. I am again indebted to my friend the drawing-master (who seemed to take an increasing delight in me) for the prefixed portrait of me as I appeared at the great Sydenham Show—see page 89.

Yes, reader, this is as I stood in the presence of Royalty, which had quitted its gorgeous palaces and courtly throng to behold and admire the forms and tints of Nature's choicest flowers, at once pleasing the eye with their soft and brilliant hues, and delighting the senses with their balmy perfumes. As the day advanced thousands of happy faces passed us by, their attention often diverted by the bands of music stationed in various parts of the The day wore proudly on, the sun was sinking in the horizon, the music ceased, the company retired, and we prepared to return. We were replaced in the van. and started fairly, but as we neared home I found myself subjected to some awkward jerks, arising from Poor old Dobbin had found the sudden stoppages. journey almost too much for him, and I heard Jacob say he expected every moment to see him "founder." Even cheery words at length failed, and we came to a standstill. In this dilemma Jacob bethought him of his horn, which he drew from under the sawdust, and played a martial air, which stimulated old Dobbin to renewed efforts. As we entered Cheerup the tune was changed to "See, the conquering hero comes!" and I never could satisfactorily settle in my mind whether by this delicate allusion to our victory Jacob meant himself or me. It was now two o'clock in the morning, and sundry heads in nightcaps were suddenly thrust out of upstairs windows, to be suddenly withdrawn when the cause was made apparent. One old man, the village tailor, whose father had been a Coastguardsman when Napoleon threatened a descent from Boulogne, and who always believed the French would come some day, jumped out of bed, seizing his goose with one hand and his scissors with the other. He soon saw, however, how matters stood, and as he retired, pale with fright, closing the window, he exclaimed, "Confound that hare-brained sailor-gardener! I thought the French were coming!" The grave-digger, too, was aroused. He had been spending the evening with a friend at the "Goose and Gridiron," and on his return home was amusing himself with a last pipe and the perusal of "Mother Shipton's Prophecies." He had dropped asleep in his arm-chair, and started up under the illusion that the old lady was right after all, and that the day of reckoning had come. The longest and strongest display of Jacob's musical attainments was, however, reserved for John's cottage, under whose windows Jacob blew so lustily that he made the very welkin ring, and I thought him lucky in being beyond the district of the metropolitan police. I heard him say, "John didn't like things done by halves, and so he meant to give the old chap a 'good 'un.'" John, however, calm whether asleep or awake, was not to be brought out by the sound of a horn; he was wide awake, too wide awake, for that. Well, we reached home in safety, though somewhat dusty, thirsty, and fatigued; and long shall we remember that eventful day. Although somewhat bruised with our journey, more company than ever came to see us. as our fame had risen with our success. Among others, the young philosopher made his appearance. I thought he had grown much older within the last two years, and he seemed more humble and deferential than formerly. He conversed with my master about me with evident interest, and appeared to have gathered some knowledge of my habits and nature. I heard John say, after he had gone, that he had written a book on philosophy which the world laughed at: and he had therefore given up the "study of mankind," saying "they could not understand him," and taken to the study of butterflies! John further remarked that according to his judgment he was incomprehensible to man, and he supposed butterflies would not be expected to understand him.

Jacob had met the Squire at the Show, who was so pleased with the success which John and he had achieved that he suggested that they should show Cut-Roses as well as Pot-Roses the following year. This suggestion Jacob kept turning in his head all the way home, but could neither see through it nor into it. When he reached home he was tired and hungry; the journey and the excitement had fairly knocked him up. Unfortunately he had nothing in his cupboard but cold roast pork -a bad supper for an exhausted man-of which he ate heartily, and crept to his dormitory. But he could not sleep. The proposal of showing Cut-Roses the next year was to him a terra incognita in which he had been roaming and speculating ever since the Squire mentioned it. But if he did not sleep soundly he dreamt wildly. Now he was cutting Roses for the Show, and the flowers screamed out as he severed them from the Again, the rose bushes would creep under his stem.

head, and he started up, fancying they were pricking him, or that he was crushing the flowers. Then he was at the show and "fighting the dodger," to prevent him practising some trickery with the view of "jockeying" his competitors. Again, the show was over, and one exhibitor who had gained a leading prize was found to have stuck the petals of his flowers together with gum to prevent them from unfolding. On discovering this the Judges withdrew the prize, but on the question being referred to the Committee of another society they gave it back again to the "gummer," notwithstanding a rule that the Flowers were to be shown as cut from THE TREES had clearly been transgressed. Jacob, like many others, protested, and was now in the midst of a hand-to-hand fight between the "gummers" and "nongummers," John doing his best to secure fair-play for both parties, and, as is usual in such cases, receiving sundry awkward blows for his pains. Jacob rescued him, and they left the room together, Jacob saying as he went out, "I don't go aboard that ship again. I don't like her captain or her crew, and she is not seaworthy." At length he sank into a long though disturbed sleep, his dream continuing, and on awakening he found the sun high in the eastern sky. He dressed hastily, and hurried out. "Rather late, Jacob," said John, who with the Squire met him coming from his bothy-"rather late; tired, I suppose, eh?" Jacob," said the Squire, "how wretched you look! Whatever is the matter with you! Are these the fruits of victory?"

Jacob told him he had slept badly, and had been dreaming about Cut-Roses ever since he went to bed. He was beginning to tell John his dream when the latter stopped him saying—"Well, well, we will hear that in the evening; let us now go and attend to our daily work." Happily the longest working-day has a close,

and in the evening Jacob, by John's invitation, went to the cottage of the latter to relate his dream. Suffice it to say that much of it was about the doings of a certain Society and the "gumming of show-roses," and as John thought "gumming" mean and dishonest as well as contrary to the rules of the Society, he did not wonder that Jacob was mortified in his dream by the decision of the Committee.

But this was not all. He had dreamt that Mr Leek the nurseryman had brought the Squire a newspaper in which a long rambling letter appeared saying, that although John had been awarded the first prize, he had not won it fairly, for he had three roses of one sort in his collection, and had bought half of the others, and borrowed the rest. Although this letter was signed "Fair Play," it came out that it was written by the "dodger," who assumed various pseudonyms to conceal his spite and envy. Jacob was furious, and threatened to put him under the pump. The Squire said it was a contemptible calumny, and an apology should be demanded from the editor, who in giving place to it was as bad as the inventor. But John said, "Poor scribe! leave him alone. He is as usual trying to make his dull wretched whimsevs readable by spicing them with malice and lies. None but those of his own kidney pay any attention to him. I would rather not be heard of in his company, even as an antagonist.

Jacob, like many men who have been to sea, was fond of the marvellous, and was himself easily "gulled" withal. For days after his return he would spin long yarns to those who were inclined to listen to him of the things he had seen and heard of at the great Show. He declared that he had seen lilies as blue as larkspurs and as big as his hat, and that one gardener told him his grapes last year were as large as plums, and his peaches weighed over a pound apiece. John drily remarked, "It

was a pity he did not show them, then." Jacob averred, too, that he had seen some Roses which, like "the big folk at the Hall," could trace their descent from the days of Adam! He did not think them particularly good-looking, but they were Roses that all the swells were pressing to see, although the common people seemed frightened at their uncommon history, and kept an awful distance from them. He thought they called them fiddle-de-dee Roses. Here, as often, John corrected him. "Pedigree Roses, Jacob, not fiddle-de-dee, but pedigree." As Jacob was not well up in any but common words, he readily acquiesced, merely remarking that if it had not been for their "pedigree" he should not have thought much of them.

I might fill volumes were I to set down all who came to see me and all they said; but I fear that I have already told too long a tale, seeing that it is all about myself. Let me, in conclusion, say a word about my master. His garden was open to the humblest as well as the greatest, and I believe he found one of his chief sources of pleasure in the delight which he thus imparted to his fellow-men. Although the villagers thronged his walks at certain hours, no flower was plucked, no border trampled on, for reproof from all would quickly have visited him who should injure the property or do violence to the feelings of the good Squire. In his own village his presence was always hailed with delight, whether in urging on the young to engage in learning or sports, in encouraging the advanced to sustain the toils and difficulties of business, or in imparting aid and consolation where age and want had rendered such services acceptable. Indeed his every act was prompted by benevolence, and his influence was even more remarkable for its kind than for its extent.

John bore his honours meekly, and did not forget Jacob's efforts in the struggle; and preparations were

presently made to maintain the position so sedulously acquired.

Reader, this has been a true autobiography, and not a mere creation of fancy. I still exist as an Exhibition Rose, and should you wish to see me, you have only to look for me among the Pot-Roses at the London flower shows in the spring of the coming year.

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